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NSET
Disaster Resilient Communities in Nepal

# EFFORTS ON CAPACITY ENHANCEMENT ON EMERGENCY RESPONSE

**Enhanced Capacity for Emergency response in the Asia Pacific – Results of the efforts of the Program for Enhancement of Emergency Response implementation over two decades**

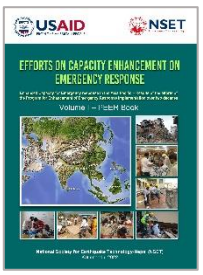
## Volume I – PEER Book


**National Society for Earthquake Technology-Nepal (NSET)**
Kathmandu, 2022

# Efforts on Capacity Enhancement on Emergency Response

**Enhanced Capacity for Emergency response in the Asia Pacific – Results of the efforts of the Program for Enhancement of Emergency Response implementation over two decades**

**Volume I – PEER Book**

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Volume 1 of 2

# Message from National Disaster Risk Reduction and Management Authority (NDRRMA), Nepal

Government of Nepal
Ministry of Home Affairs
**National Disaster Risk Reduction & Management Authority**

Ref. ग्रह

Singhadarbar, Kathmandu
Nepal

**MESSAGE**

The Program for Enhancement of Emergency Response (PEER) partnership has been of timely and effective support to enhance Nepal's emergency response system.

Nepal is no stranger to various disasters caused by natural hazards and human-induced emergencies, much of which are worsened by climate change. To respond to emergencies and catastrophic disasters we require highly skilled emergency response teams. The PEER partnership has been of help in enhancing Nepal's emergency preparedness and response systems even since Nepal entered into the PEER partnership.

The National Disaster Risk Reduction and Management Authority (NDRRMA), Ministry of Home Affairs, Government of Nepal joins hand with our PEER-trained emergency response experts, professionals and community volunteers in continuing PEER legacy in the country.

We extend our gratitude and best wishes to NSET and USAID/Bureau for Humanitarian Assistance (BHA), and all PEER stakeholders.

Anil Pokhrel
Chief Executive

14 March 2022

Phone: 01-4211090, 4211093, Email: info@bipad.gov.np, ndrrma@gmail.com, URL:www.bipad.gov.np

# Message from USAID/BHA

USAID's Bureau for Humanitarian Assistance (BHA) commends PEER for its work improving emergency response capacities in Nepal and across Asia. Nepal offers many useful lessons for PEER implementation across the region and this publication will serve as a critical reference for PEER partner institutions in other countries. May the successes, challenges and lessons learned from PEER continue to motivate Nepal and the rest of PEER region strive for a sustainable level of capacity building, strengthened coordination and networking in emergency response. Congratulations to all PEER partners in the region.

USAID Bureau for Humanitarian Assistance

# Message from Chief of Party PEER and President NSET

The Program for Enhancement of Emergency response (PEER) was implemented in the 1980/1990s in Latin Americas, the Caribbeans, and the South Pacific by USAID/OFDA as an Urban Search and Rescue (USAR) program, and it was then brought to Asia in 1998.

The first phase of PEER was implemented from 1998-2003 and introduced in the region by Asian Disaster Preparedness Centre (ADPC) with program implementation in four countries, namely, Indonesia, India, Nepal, and the Philippines. The focus of the program was acceptance in the region, adaptation of the courses to Asian realities and needs, and development of regional instructors.

Success of the program demanded its continuation as institutionalization of enhanced emergency response capacity for reducing mortality from natural hazard disasters requires a sustained effort. The US Office of Foreign Disaster Assistance (US OFDA), which provided core funding for the PEER program, entrusted National Society for Earthquake Technology-Nepal (NSET) during 2003-2009 in the four countries with Bangladesh as a fifth country. After the devastating Kashmir earthquake of 2005, Pakistan was also added as the sixth country for PEER implementation. The focus of the second phase of PEER program was development of a training system and institutionalization of MFR, CSSR, and TFI curricula in national emergency response training institutions that usually were in the public sector. This entailed development of national instructors by adopting a stepwise process of a) providing end-users training to well-selected responders with proven potentials of developing into instructors, b) training the selected potential candidates to the skills of adult education and training by selecting them for the Training for Instructors course, and c) selecting the successful candidates to instructor development courses such as MFR Instructor's Workshop (MFRIW) and CSSRIW. NSET developed / updated the last two courses with the help of Regional Instructors from the program countries. In this phase, a new curriculum on Hospital preparedness for Emergencies (HOPE) was created and implemented. HOPE also become one of the most attractive courses for health-sector personnel. This phase of PEER expressed the need to bring the capacity to the community level as well, and hence the course Community Action for Disaster Response (CADRE) was developed, piloted, and included as one of the regular courses under the program.

Later, again responding to the felt need for imparting skills in rescuing victims in swift waters, which were many in the mountainous parts of the program countries.

The third stage of PEER program was implemented from 2009-2014 by NSET. The focus of the third phase was on the adaptation of courses at the National level in the region, and to develop highly competent national instructors. During this phase the community level preparedness need was identified and was also implemented. Trainings were implemented for their preparedness.

The fourth phase of PEER was implemented by NSET until the end of September 2021. ADPC was also awarded a portion of PEER activities for implementation in South and Southeast Asia. In the fourth stage, the major focus was on the development of responders and instructors in Medical First Responder (MFR), Collapsed Structures Search and Rescue (CSSR), Hospital Preparedness for Emergencies (HOPE), Community Action for Disaster Response (CADRE), and Swift Water Rescue (SWR) as well as to develop networking and cooperation among the countries in the region.

Due to the global pandemic of COVID 19, PEER had to face challenges in the implementation of the program, however this adverse situation brought out innovative ideas like online refresher courses, and hybrid courses.

In the fourth phase of PEER, NSET initially implemented the core programs in four countries namely, Bangladesh, India, Nepal, and Pakistan. ADPC continued implementing PEER in Southeast Asian countries, namely Cambodia, Indonesia, Lao PDR, Philippines, and Thailand. During this fourth phase PEER program was also partially implemented in the rest of SAARC countries, namely Afghanistan, Bhutan, Maldives, and Sri Lanka by inviting participants to attend some regional training and strategy exploration workshops. All PEER courses like CADRE, MFR, CSSR, HOPE have undergone real-time tests as the trained graduates had to respond to real disasters and in all these situations our graduates delivered international level services of search and rescue be it the Handling of Savar factory collapse in Bangladesh, the aftermath of 2011 Tohoku earthquake in India or the Gorkha Earthquake in Nepal. There was a close collaboration and understanding during the critical times of Gorkha earthquake among Bangladeshi, Indian, and Nepali emergency rescuers as they were all trained in the same standards and culture of PEER, and the ease with which they coordinated with international contingents of rescuers was noteworthy as well as this justified our strict adherence to the PEER standards and quality of the training programs.

The earlier phases of PEER courses were focused on developing the instructors however in the later phases the focus shifted to emphasizing on the production of end-users as the program helped in the development of a significant cadre of

professionally trained PEER instructors and the PEER courses were successfully institutionalized in the national training institutes of project countries with due sensitivity to local contexts and needs. Since the PEER courses are interconnected CADRE-trained community responders could provide appropriate initial care, then handover the scene to professional responders upon their arrival at the scene, and hospitals could continue to smoothly receive so that in the event of an emergency, injured victims as they were equipped with properly trained personnel and well-established system of hospital preparedness for emergencies. As a part of the training program CADRE, community volunteers are given access to the basic emergency response equipment and tools they need to effectively respond quickly at the very outset of an emergency. In the golden hour of emergency response, the role of community volunteers is critical. In the absence of professional responders or the delayed arrival of advance-level emergency response teams, trained community responders can help save lives. For professional responders, MFR and CSSR training allows national and sub-national response teams to work alongside international emergency response teams during large disasters, saving more lives. Hospitals develop disaster response plans as part of the HOPE course to be better prepared for various emergencies and disasters.

A proficient team of instructors and responders has been developed in all project countries of the region. These responders from different countries have formed an informal regional network among themselves. It is expected that such practice of informal networking will be handy in case of any emergency in the region for collaborating and working together in situation of materials and equipment constraints. Adherence to the PEER course system and standards in the different courses in all countries also become very useful as responders from different countries can work coherently without any language barrier. A comprehensive database system has also been developed from where respective authorities will be able to collect the data regarding PEER instructors and developers for strategic planning and developing responders and instructors and mobilizing in need. Different information on PEER history, achievements and lessons learned have also been documented in PEER book (Volume I) and PEER Album (Volume II).

PEER courses like MFR, CSSR have also been successfully institutionalized and implemented in Nepal. All security forces in Nepal have formed disaster management schools and they have adapted these courses and included in their annual training calendar. They have developed many responders and it has been a continuous process. Similarly, the courses have also been implemented in all the different PEER countries by different organizations like Fire Service and Civil Defense (FSCD) and Bangladesh Red Crescent Society (BDRCS) in Bangladesh, National

Disaster Response Force (NDRF) in India and Rescue 1122 and Pakistan Red Crescent Society (PRCS) in Pakistan.

The real-life stories from PEER countries featured in this book are verification of the program's success, and the lessons learned pave the way for future improvements. May these serve as motivation and inspiration for us to rise to the challenges and continue our efforts to save lives.

I would like to thank everyone who made this program possible through their hard work and dedication. My special thanks to USAID/BHA for supporting in program implementation. I express my gratitude to the nodal organizations, partner agencies, and other stakeholders of PEER implementing countries; respectful appreciation to course developers, instructors, and responders for working together with full understanding for the past three decades under the program. Last but not the least, I express my heartfelt thanks to PEER program team, including PEER In-country Consultants (ICCs) in different countries, for their complete buy-in of the program and their full support and dedication during its implementation.

(Signature)

**Dr. Amod Mani Dixit**

Chief of Party (COP) PEER

President, National Society for Earthquake Technology-Nepal

# Message from Executive Director, NSET

The National Society for Earthquake Technology-Nepal (NSET) is proud to be a part of the Program for Emergency Response Enhancement (PEER). NSET implemented PEER since 2003, starting with PEER stage 2 and continued through stage three (2007-2014) and stage four (2014-2021). Stage IV has been completed however NSET will continue to work in the future to spread the success and best practices of PEER as well as to contribute for preparedness, risk reduction and response (PR3) to disasters.

Participating in the successful execution of PEER has provided NSET with a wealth of knowledge in terms of concepts, networking, standardization, accreditation, institutionalization, localization, and sustainability. The culture of adapting is also an important lesson which has made NSET more potential in implementing other programs in the future. NSET has been a key player in ensuring PEER's suitability and long-term viability in Asia since its inception. PEER provided a platform for continuous learning, including the exchange of experiences and expertise among program countries, which is critical to improving emergency response capacity and networking at the regional, national, and local levels. PEER improved networking among PEER graduates and instructors from various backgrounds and fields of expertise, which was crucial in nationalizing and institutionalizing the program for effective response. The contribution of PEER skills and role of PEER graduates/responders in responding to the 2015 Gorkha Earthquake in Nepal was highly and widely appreciated.

NSET has been successful innovate in the way it conducts the programs. The main courses of PEER, such as Medical First Response (MFR) and Collapsed Structure Search and Rescue (CSSR), were designed in a basic form to produce a limited number of responders. Swift Water Rescue (SWR) is a new PEER course introduced to the region that needs to be institutionalized and accredited. All PEER course delivery methodology required the physical presence of all course team members, including participants and instructors; however, due to the current COVID-19 pandemic the course delivery methodology has shifted to entirely online and/or blended format. During this period NSET PEER offered regional online refresher courses in MFR, HOPE, and CADRE.

The eagerness with which PEER implementing countries and training institutions have embraced the program is vital for strengthening national emergency response efforts. The commitment and support of governments and emergency response

organizations are critical to achieving PEER's goal. NSET is eager to work with stakeholders in any way possible to further develop responders in all South Asian countries and take it even further to the local governments and community levels. NSET focuses on strengthening the national and regional networking groups for future coordination and collaboration on ongoing works and trainings such as refresher courses, equipment prepositioning, upscaling and expanding training courses, and developing and adopting new courses.

NSET appreciates all the hard work done by PEER program team, including In-Country Consultants, graduates, instructors, and other individuals who have contributed in different ways for achieving PEER objectives.

We sincerely thank USAID BHA for continuous support for PEER implementation for more than two decades. Similarly, NSET is thankful to the nodal agencies of all PEER implemented countries, implementing institutions and partner organizations.

**Surya Narayan Shrestha**

Executive Director

National Society for Earthquake Technology-Nepal (NSET)

# Message from Nepali Army, Nepal

नेपाल
प्रधान सेनापति
**Chief of the Army Staff**

General Prabhu Ram Sharma
Chief of the Army Staff
Nepali Army

**MESSAGE**

It is a distinct privilege to congratulate the Program for Enhancement of Emergency Response (PEER) for publishing the PEER book to inscribe the contribution and achievements in the domain of disaster management.

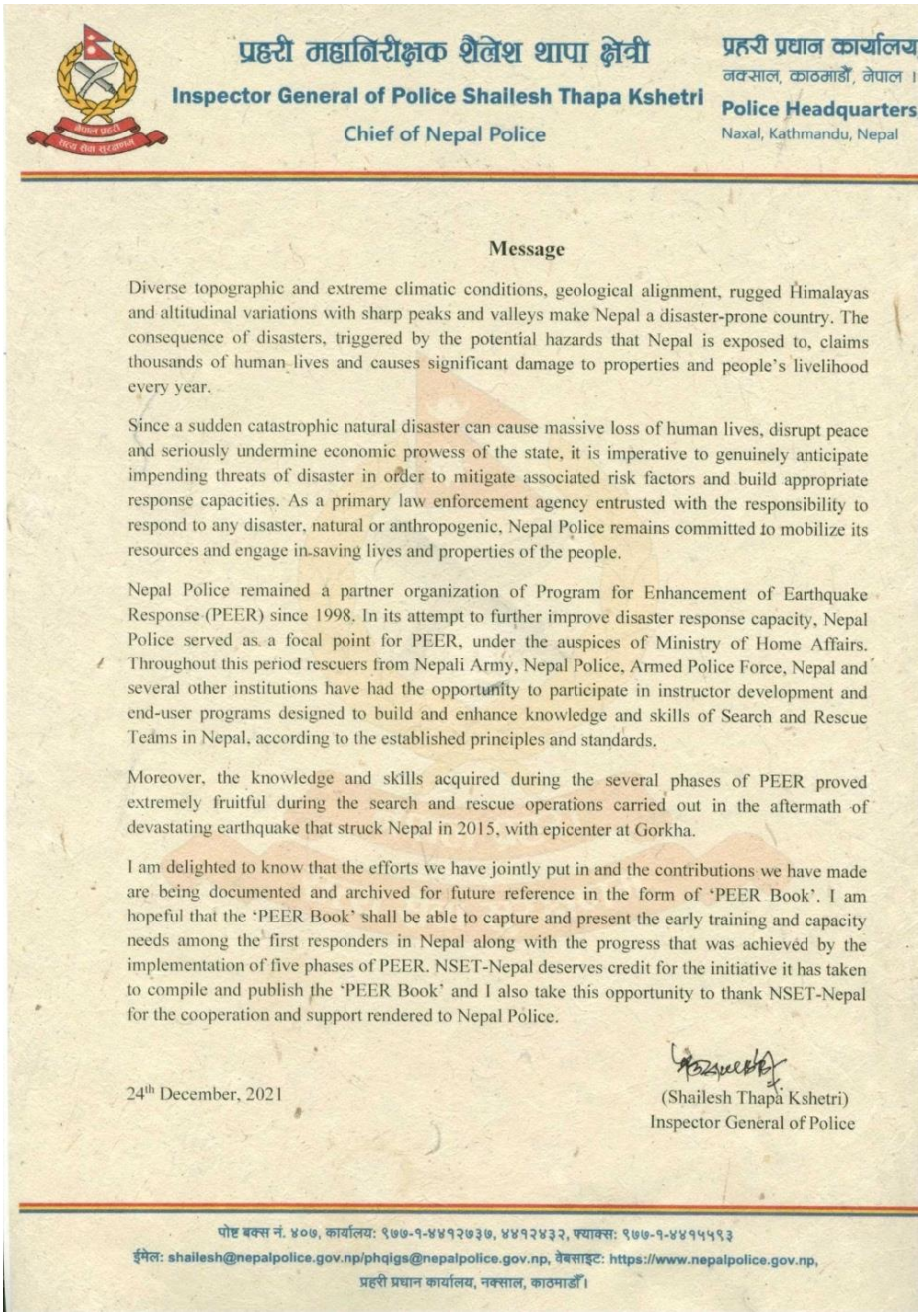
PEER has played a significant role in strengthening the Nepali Army's emergency response capacities since 1998. Further, PEER-trained graduates and instructors have contributed significantly to enhancing the efficiency of Nepali Army personnel in disaster response.

I feel glad to mention that Nepali Army also pursues developing the medium to advance search and rescue teams for a speedy and effective response during large-scale disasters in Nepal and other countries. We continue to strive to elevate hospital preparedness for all mass casualty incidents through the establishment of Mass Casualty Treatment Centre (MCTC) and effective Hospital Preparedness for Emergencies (HOPE) program.

I take this opportunity to express sincere appreciation to NSET and USAID/BHA for all the support rendered to the Nepali Army over the years and wish for thriving success in all our future endeavors to save lives and properties together.

Prabhu Ram Gen.
General Prabhu Ram Sharma
Chief of the Army Staff

# Message from Nepal Police



प्रहरी महानिरीक्षक शैलेश थापा क्षेत्री
Inspector General of Police Shailesh Thapa Kshetri
Chief of Nepal Police

प्रहरी प्रधान कार्यालय
नक्साल, काठमाडौं, नेपाल ।
Police Headquarters
Naxal, Kathmandu, Nepal

**Message**

Diverse topographic and extreme climatic conditions, geological alignment, rugged Himalayas and altitudinal variations with sharp peaks and valleys make Nepal a disaster-prone country. The consequence of disasters, triggered by the potential hazards that Nepal is exposed to, claims thousands of human lives and causes significant damage to properties and people's livelihood every year.

Since a sudden catastrophic natural disaster can cause massive loss of human lives, disrupt peace and seriously undermine economic prowess of the state, it is imperative to genuinely anticipate impending threats of disaster in order to mitigate associated risk factors and build appropriate response capacities. As a primary law enforcement agency entrusted with the responsibility to respond to any disaster, natural or anthropogenic, Nepal Police remains committed to mobilize its resources and engage in saving lives and properties of the people.

Nepal Police remained a partner organization of Program for Enhancement of Earthquake Response (PEER) since 1998. In its attempt to further improve disaster response capacity, Nepal Police served as a focal point for PEER, under the auspices of Ministry of Home Affairs. Throughout this period rescuers from Nepali Army, Nepal Police, Armed Police Force, Nepal and several other institutions have had the opportunity to participate in instructor development and end-user programs designed to build and enhance knowledge and skills of Search and Rescue Teams in Nepal, according to the established principles and standards.

Moreover, the knowledge and skills acquired during the several phases of PEER proved extremely fruitful during the search and rescue operations carried out in the aftermath of devastating earthquake that struck Nepal in 2015, with epicenter at Gorkha.

I am delighted to know that the efforts we have jointly put in and the contributions we have made are being documented and archived for future reference in the form of 'PEER Book'. I am hopeful that the 'PEER Book' shall be able to capture and present the early training and capacity needs among the first responders in Nepal along with the progress that was achieved by the implementation of five phases of PEER. NSET-Nepal deserves credit for the initiative it has taken to compile and publish the 'PEER Book' and I also take this opportunity to thank NSET-Nepal for the cooperation and support rendered to Nepal Police.

24th December, 2021

(Shailesh Thapa Kshetri)
Inspector General of Police

पोष्ट बक्स नं. ४०७, कार्यालय: ९७७-१-४४१२७३७, ४४१२४३२, फ्याक्स: ९७७-१-४४१५५९३
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प्रहरी प्रधान कार्यालय, नक्साल, काठमाडौं।

# Message from Armed Police Force, Nepal

## Message from Inspector General
## Armed Police Force, Nepal

It gives me immense pleasure to know that NSET Nepal is publishing a "Program for Enhancement of Emergency Response (PEER) Book" after completion of stage IV program in 2021. I hope this book will accumulate the best practices and achievement during PEER Stage I to Stage IV, to build a resilient and safer community which will be beneficial to all stakeholders &remain as an institutional reference. PEER is not only supporting to produce instructor and end users but also provides contents for Disaster Management Training of APF, Nepal. Medical First responder (MFR) and Collapsed Structure Search and Rescue (CSSR) are crucial skills learnt through PEER and those skills have been tested time and again, especially during Mega Earthquake in 2015.

Armed Police Force, Nepal was established in 2001 with one of the mandates of disaster rescue and management, along with others. APF, Nepal has started with limited resources and capacity for developing and enhancing its personnel as emergency responders and now boasts hundreds of trained and skilled responders. I take this opportunity to express my gratitude to all stakeholders for the cooperation and coordination to strengthen the capacity of APF, Nepal in the areas of disaster management.

PEER has not only achieved to strengthen disaster response capacities in Asia, it also has been contributing to carry out the rescue operations led by different agencies throughout the world. The trainings under PEER are proven to be rigorous, fruitful and practical. In addition, PEER's success in the area of disaster response is exemplary to others as well.

Beyond PEER stage IV, APF, Nepal envisions a better emergency response system, coordination and networking in Nepal and South Asia.

(Shailendra Khanal)
Inspector General
Armed Police Force, Nepal

# Message from Nepal Red Cross Society

Nepal Red Cross Society

Name: Umesh Prasad Dhakal

Designation: Executive Director

Organization: Nepal Red Cross Society

**MESSAGE**

The journey of Nepal Red Cross Society (NRCS) with PEER began in 1998 when Nepal was among the initial beneficiary-countries in the program.

NRCS is an active PEER partner for MFR and CADRE courses. These courses are foundational in making NRCS better equipped in development of responders, mainly community volunteers. CADRE is an essential part of NRCS' training programs to multiply community volunteers nationwide – an investment with higher returns. Trained community volunteers could bridge the gap in the Golden Hour of response prior to the arrival of professional responders.

We are also grateful that NRCS could assist other PEER partner institutions in Nepal and in other PEER countries for developing qualified MFR and CADRE instructors. We express our steadfast commitment for PEER, including assisting other program countries, whenever required.

NRCS extends its gratitude and looks forward to strengthening collaboration with NSET and USAID/BHA.

Umesh Prasad Dhakal
Executive Director

# Message from Fire Service and Civil Defense Directorate, Bangladesh

*Fire Service & Civil Defence Directorate*
*38-46 Kazi Alauddin Road*
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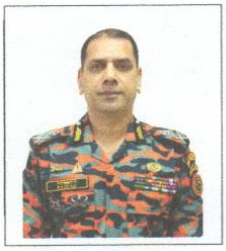

**Fire Service and Civil Defence Directorate, Bangladesh.**

**MESSAGE**

Fire Service and Civil Defence (FSCD) Bangladesh has come a long way in upgrading the institution that including professionalizing the FSCD teams. FSCD acknowledges the important role PEER has contributed to the process of FSCD's training improvement efforts. Learnings from PEER, FSCD has improved training and its environment systems that brings out the best from trainees' performance for responding effectively in emergencies and disasters.

From FSCD Bangladesh and all other PEER partners in the country including the Government of Bangladesh, we convey our deep appreciation to NSET and USAID/BHA.

06/02/2022

Brigadier General
Md. Sazzad Hussain, ndc, afwc, psc, Mphil
Director General
Fire Service and Civil Defence
Directorate.

# Message from National Disaster Response Force (NDRF), India

**Shri Atul Karwal, IPS**
**DG NDRF**

**MESSAGE**

India is a PEER program country since 1998. Since then, various specialized courses on MFR and CSSR have been organized for the country's paramilitary forces and still continue for the capacity building of National Disaster Response Force (NDRF) India.

PEER has been instrumental in laying strong foundations for a wide range of engagements by India's emergency response teams – from community empowerment, national emergencies to deployment in international humanitarian and disaster response.

I am happy to note that a decision has been taken by PEER program partners to publish the PEER Book documenting the journey so far. May this book serve as a living testimony of all successes by PEER in India and in the region.

NDRF extends its gratitude and best wishes to NSET and USAID/BHA and all PEER partners.

**Atul Karwal, IPS**
**Director General**
**National Disaster Response Force, India**

# Message from The National Disaster Management Authority (NDMA), Pakistan

**MESSAGE**

The National Disaster Management Authority (NDMA)-Government of Pakistan extends its gratitude to NSET and USAID/BHA for the indefatigable support through PEER in Pakistan. The country has seen advances in the country's emergency and disaster response after being inducted in PEER since 2007.

Strong and sustained capacity building makes a huge difference in providing quick response at all levels – from community level by volunteers, by professional responders, to making hospitals ready and operational for all emergencies and disasters.

We look back learning from the past and from other countries, to be able to move forward positively in collaboration with all stakeholders, in saving more lives and promote a culture of resilience in Pakistan and South Asia.

**Muhammad Idrees Mehsud**
Member (DRR)
National Disaster Management Authority
Government of Pakistan
Islamabad
31st December 2021

# Message from Rescue 1122, Pakistan

Pakistan is the fifth largest country in the world with a population of 227 million spread over 881913 sq. kms. Pakistan has diverse topography with the world's highest mountain peaks located in Karakoram Range in the north, desert & riverine areas in the middle and Arabian Sea in the South. This topography, location overactive fault line and increasing number of high-rise buildings and traffic has increased the vulnerability of Pakistan to accidents, emergencies and disasters.

Accordingly, Emergency Services Reforms were initiated in 2002 and a model of integrated Emergency Services known as Rescue 1122 was started from the historic city of Lahore which has become a sustainable model for South Asia. Rescue 1122 has provided a sense safety to the citizens by rescuing over ten million victims without discrimination with an average response time of 7 minutes and saved losses worth over Rs 500 billion through its Emergency Ambulance, Fire & Rescue Services, Community Emergency Response Teams, and Safety Program.

A purpose-built Emergency Services Academy has also been established to ensure sustainable human resource development of emergency services and has trained over 20,000 Emergency professionals from all provinces of Pakistan. Rescue 1122 has also provided CADRE training to over 5000 Community Emergency Response Teams (CERTS).

I highly appreciate the role of PEER Program which was instrumental in setting the foundation of Emergency Services Reforms in Pakistan after the devastating Earthquake of October 2005 in Pakistan. PEER helped in capacity building of instructors for continuous training for Medical Response, Search & Rescue and Community Action for Disaster Response. This capacity building helped the Emergency Services Academy to become the First United Nations INSARAG Classified Team in South Asia.

We would be pleased to share our experiences and learning with our neighbouring PEER countries to enhance regional capacity for Emergency Management and Disaster Response so that we could develop Safer Communities in South Asia.

**DR. RIZWAN NASSER**
**DIRECTOR GENERAL**

# Preface

A squad of knowledgeable, skilled, and dedicated Emergency Responders in pertinent organizations in the region was only a concept and not in real practice in the times prior to the start of the Program for Enhancement of Emergency Response (PEER) that was started as a regional program including Nepal in 1998. Any country, especially one that is prone to disasters like Nepal, must have well equipped system of emergency response with skilled professional responders. PEER was conceived with the goal of creating a system to improve national as well as community-level first responder capacity and enhancing capacity of hospitals and medical facilities to handle mass casualty incidents, developing in-country instructors for the long-term sustainability of the program in disaster-prone countries of Asia including Nepal. The program started in 1998 with emergency response training courses on Medical First Responder (MFR), Collapsed Structure Search and Rescue (CSSR) and Training for Instructors (TFI). They used the curricula and experiences of US Instructors in training responders in the countries of Latin Americas and the Caribbean in Spanish language by the USAID Office of Foreign Disaster Assistance (OFDA), which has now been transformed into Bureau of Humanitarian Assistance (BHA). Once the emergency response system personnel of initial program countries got familiarized with the system of the training system, the demand for such training programs grew together with the demand for developing other training courses following similar methodology and standards. The PEER implementers, both ADPC and NSET responded expertly to such felt needs: a series of training courses were developed by Asian experts mobilized from the program countries. Instructors' development courses like MFR Instructors' Workshop (MFRIW), CSSR Instructors' Workshop (CSSRIW) HOPE-Training for Instructors' (H-TFI) were also developed. Other end-user courses like Community Action for Disaster Response (CADRE), MFR-Basic, CSSR-Basic were also developed in the PEER years. All these developed courses were piloted, conducted, and institutionalized in the partnering training institutes of the various program countries as per their statements of training needs and support. The implementers of PEER received remarkable understanding, flexibility, and support form USAID by allowing us to respond as per the needs and demands of emerging situation. No wonder PEER was a grand success and a game changer in the developing countries of Asia.

PEER course materials are all in English (standard version). Following the adaptation of course packages, countries may wish to translate the materials into their national or regional languages. The course materials for MFR and CSSR have been translated into Bengali (Bangladesh), Bahasa (Indonesia), Hindi (India), Nepali (Nepal), and Urdu (Pakistan). Furthermore, PEER Courses are graded on a pass/fail basis. These

courses are conducted by a course coordinator, lead instructors, and assistant instructors using the interactive lecture method (ILM), which is objective-based, performance-oriented, tested, and highly participatory. An experienced course monitor is assigned to oversee the overall delivery of the course.

The impact of a program on the development of emergency responders is evidently visible in the comparative figures of the program outputs for the years from 1998 to 2022. PEER courses have set the standards of emergency response training programs due to the unique curricula adopted, adapted, and updated with strict requirements, both in terms of pedagogy of adult education and the corresponding training equipment and facilities. These have been set as a benchmark in developing quality disaster emergency responders and instructors from basic end-user ones to the instructors' development courses. This has not only helped institutionalize the courses irrelevant of training institutions in the project countries, significantly increasing the number of skilled professional emergency respondents, but the process has also developed into a close-knit network that connects all emergency response partner institutions within and outside the countries.

Implementing a standard program and envisioning it being institutionalized in the country raises several concerns about maintaining and continuing the standard of these courses. Some of the major challenges that were faced included a general comment on the high numbers of training days, the requirements of the number of instructors for a limited number of 24-28 participants (maximum), and the high cost of training. Another challenge was maintaining the standards of the training programs and the systems as any significant deviation in these factors would have jeopardized the establishment of a credible training program. Maintaining the standards however could lead to an internationally compatible emergency response system, and development of high-quality skilled responders who could work on equal footings with international emergency responders that are usually deployed and the UN system at the request of national governments. PEER addressed these challenges by ensuring a minimal or no deviation in the content and quality of deliberation of PEER courses, and institutionalization of the PEER courses in various organizations all over in PEER partner countries. These courses have not only been adopted by security forces, volunteer organizations and civil societies, but these courses have also been taken to communities, where they are taught according to their level of understanding in their own language.

PEER Book, Volume-I of this publication: "Efforts on capacity Enhancement for Emergency Response" is a testament to the program's success, as it contains details on the program's evolution and impact throughout the countries of South Asian region. There has been evolution in the courses as well; one hand there was a continuous process of development of new courses as per assessment of their

training needs, and one the other, a continuous process of updating the courses to contemporary advances in technology. Adaptation of courses to the changing/local context and to the emerging situation due to change in capacities and capabilities have also been worked on side by side. The PEER Book tries to convey how PEER began with basic courses such as Medical First Responder (MFR), Collapsed Structure Search and Rescue (CSSR), Hospital Preparedness for Emergencies (HOPE), Community Action for Disaster Response (CADRE) and Swift Water Rescue (SWR). These courses have now been adapted, translated, and developed in various formats such as basic courses, reference courses, Instructor's Workshops, and most recently online courses. Despite the challenges and obstacles to its onsite implementation caused by the COVID-19 pandemic, the PEER program never failed to achieve its goals of developing instructors and responders: physical classroom training programs were quickly transformed into online courses during the advent of COVID-19 for all courses that allowed such transformation in course delivery. In many cases, we had to resort to hybrid modes as well.

The PEER Book also provides brief accounts of actual use of the PEER outcome in the various disaster scenarios where PEER graduate responders have responded and saved lives.

The PEER Album (Volume-II) provides information on PEER courses conducted under NSET-PEER. The album presents the information such as course title, date, venue, and complete list, including photographs of events, participants, and instructors.

The Rana Plaza Building Collapse in Bangladesh, the 2015 Gorkha Earthquake in Nepal, the Flyover Collapse in Varanasi, India, the Padang Earthquake in 2009, several incidents in Pakistan and Typhoon Haiyan 2013, Philippines, are few among such disaster scenarios where the PEER capacity enhancement was in action and PEER graduates provided the professional leadership in reducing mortality. PEER countries have incorporated response courses after realizing the importance of the program. MFR and CSSR curricula, for example, are included in the internal training program of Bangladesh Fire Service and Civil Defense (FSCD), and these courses are also included in the regular training calendar of the National Disaster Response Force (NDRF), India. Similarly, all security forces of Nepal (Nepali Army, Nepal Police, and Armed Police Force, Nepal) and Pakistan Emergency Services (Rescue 1122) have taken these courses as foundation courses. Similarly, HOPE courses have attracted the attentions of hospitals and the medical community, and as a result, hospital emergency response plans have been developed in these countries using the HOPE guidelines. CADRE courses are also used as a model for emergency response training for community empowerment and the development of volunteers in these areas. Lastly, Nepali army referred the SWR course to develop its internal

SWR training, and NDRF, India expressed an interest in collaborating for conducting SWR in India.

There are numerus examples of community integration of PEER programs which includes NDRF, India conducting a 15-day community training programs based on CADRE. FSCD, Bangladesh has used PEER content to develop a 3-day urban disaster management program, producing more than 47000 volunteers all over the country. Similarly, Philippines have plans to incorporate CADRE into university courses, and NSET-Nepal also have developed various forms of short- term training modules based on the PEER courses like Basic Emergency Medical Response (BEMR), Community Search and Rescue (CSAR), Damage assessment Training (DAT), to help develop community -level responders.

The PEER program is more than just a development project; it is owned by the institutions involved. Trainees and instructors from all over the South Asian region have expressed their gratitude for the skills they have gained from these courses. These training modules ingrain discipline, teamwork, obedience, and the ability to teach in addition to the response skills. The book contains several stories that reflect the program's impact and its successful implementation. The PEER program is a success story that has aided in the development of the emergency squad. It has laid the foundation for the emergency response process. This process does not end there; with more specialization and improved technology in the future, the potential of taking these courses will grow even more. It has repeatedly molded itself into various forms in response to changing circumstances, and it will continue to do so in the future.

NSET, as the implementer of PEER program in stage II, stage III and stage IV and developer of various additional and supplementary emergency response courses. It is dedicated to the mission and has pledged to continue working towards enhancing emergency response capacity in Nepal and the region, at the national level to provincial and ultimately to the village and household level. NSET looks forward to continuously strengthen the partnership that has been developed and to opportunities of working together with similar institutions nationally and internationally. In addition to this, NSET also extends its willingness to extend its assistance on PEER-related matters as requested.

# Acknowledgements

In the South Asian regions, the Program for Emergency Response (PEER) was implemented and expanded with the goals and objectives: to help response agencies and institutions become better prepared to respond to and mitigate disasters effectively and efficiently. After more than two decades of implementation, the PEER has come to a successful conclusion. All the national disaster management organizations/authorities (nodal agencies), stakeholders, and implementing partners have important contribution to this program.

NSET would like to express gratitude to the donor agency, the United States Agency for International Development/Bureau for Humanitarian Assistance (USAID/BHA), for continuous support for implementation of PEER over the last two decades.

NSET is thankful to the Nodal organizations, implementing institutions/agencies and partner organizations of PEER Implementing Countries Special thanks goes to:

**Afghanistan:** Afghanistan National Disaster Management Authority (ANDMA)

**Bangladesh:** Ministry of Disaster Management and Relief (MODMR)- Department of Disaster Management (DDM), Fire Service and Civil Defense (FSCD), Bangladesh Red Crescent Society (BDRCS) and Directorate General for Health Services (DGHS), National Institute of Preventive and Social Medicine (NIPSOM)

**Bhutan:** Ministry of Home and Cultural Affairs (MOHCA) and Royal Bhutan Police

**Cambodia:** National Committee for Disaster Management, Preventive Medicine Department, Ministry of Health, Cambodian Red Cross

**India:** Ministry of Home Affairs (MHA) and National Disaster Management Authority (NDMA), National Disaster Response Force (NDRF), Indian Medical Association, All India Institute of Medical Sciences

**Indonesia:** Badan Nasional Penanggulangan Bencana (BNPB), Indonesia Fire Service, Badan Search and Rescue Nasional (BASARNAS), Palang Merah Indonesia (PMI), Indonesian Red Cross, Ambulan Gawat Darurat 118, Ministry of Health, Indonesian Scouts Movement, Jakarta Fire Service, Jakarta Metropolitan Administration

**Lao People's Democratic Republic:** Lao Red Cross

**Maldives:** National Disaster Management Authority, Maldives National Defense Force, Indira Gandhi Memorial Hospital

**Nepal:** Ministry of Home Affairs (MOHA)/ National Disaster Risk reduction and Management Authority, Nepali Army, Nepal Police, Armed Police Force, Nepal Red Cross Society, Institute of Medicine, Tribhuvan University Teaching Hospital

**Pakistan:** National Disaster Management Authority (NDMA), Punjab Emergency Services (PES) Rescue 1122, National Health Emergency Preparedness and Response Network (NHEPRN), Pakistan Red Crescent Society (PRCS), Network of Disaster Management Practitioners (NDMP)

**Philippines:** National Disaster Coordinating Council – Office of Civil Defense (NDCC - OCD), National Fire Training Institute (NFTI), Amity Public Safety Academy (APSA), Bureau of Fire Protection (BFP), Joint operations command, Philippine Military, Metro Manila Development Authority, Philippine National Red Cross, Department of Health, Emergency Management Institute of the Philippines, Philippine General Hospital, University of the Philippines

**Sri Lanka:** Disaster Management Centre/Ministry of Public Administration and Disaster Management, Ministry of Health, Sri Lanka Air Force, Sri Lanka Army, Sri Lanka Police

**Thailand:** Department of Disaster Prevention and Mitigation (DDPM), Ministry of Interior

**Vietnam:** Disaster Management Council

Similarly, NSET extends gratitude to the partner organizations, namely Asian Disaster Preparedness Centre (ADPC), American Red Cross, Initiative Outdoor, Rescue 3 International, Miami Dade Fire Rescue Department, John Hopkins University, Safety Solutions Incorporated, International Resource Group and other stakeholders for partnership, collaboration, and cooperation for successful completion of the program.

# Executive Summary

## PEER Background

Until the late 1990s, the disaster response capacity of most of Asia, especially the South Asian and Southeast Asian countries, was inadequate and demanded significant changes and improvements. In addition to being actively prone to multiple hazards such as cyclones, earthquakes and related tsunamis, extreme monsoon precipitation, droughts, landslides, and Glacial Lake Outburst Floods (GLOFs), the region also has some of the most vulnerable populations to the impacts of these hazards. A need for a well-established disaster management framework in the region was realized, including the development of well-equipped disaster response task forces bearing in the significant positive impact of timely and effective Search and Rescue (SAR) activities by the first responders at a disaster site. Also, considering that highly competent rescue teams are not easily available on-demand, and if the international rescue teams might not arrive within the first 24 hours after the disaster, countries must be able to rely upon their disaster response capabilities the most when it comes to maximizing the survival rates after disasters.

Learning from the success of the disaster capacity building programs in the Latin American and Caribbean countries in the 1980s and 1990s, and to advance and reinforce the Urban Search and Rescue capabilities of the four countries of India, Indonesia, Nepal, and the Philippines, the Program for Enhancement of Emergency Response (PEER) was consequently realized in 1997 under the assistance of USAID/OFDA. Over more than 23 years (1998-2021) and four different stages, PEER has progressed significantly in the South and Southeast Asian regions and the scope of the program has also immensely grown; the emphasis is not only on Urban Search and Rescue activities, but also on hospital management, building community response, and emergency response against multiple hazards. PEER Stage 1 introduced various courses for disaster response capacity building, which progressed towards nationalization in PEER Stage 2. PEER Stage 3 helped in the institutionalization of PEER programs, and PEER Stage 4 further integrated and consolidated the PEER programs in the region and explored opportunities for the development of additional courses based on regional demand. PEER has had enormous success in the region and can serve as a significant influence on other potential regions looking to bolster their disaster response capacity. This text shall serve as a documentation tool that highlights the major achievements of PEER and the impact it has had on the region in terms of disaster response capacity building as of the end of Stage 4 in 2021. The text can prove to be a great resource to learn from past experiences, and even be used as a reference by new prospective

countries that are looking forward to strengthening their disaster response capacities.

## PEER Scope and Evolution

A plethora of courses are conducted under the PEER program, with additional courses being constantly developed as per the time and context. As of Stage 4, there are a set of basic courses and corresponding Instructor development courses. Medical First Responder (MFR) and Collapsed Structure Search and Rescue (CSSR) courses form the core of the PEER program and have been conducted starting in Stage 1 of PEER. With the objective of better handling mass casualties and effective recuperation from disasters, Hospital Preparedness for Emergencies (HOPE) program was introduced in PEER Stage 2. To help enhance the capacity of community members to serve as first responders in disaster-prone areas, the Community Action for Disaster Response (CADRE) program was introduced in Stage 3. Similarly, PEER Stage 4 introduced Swift Water Rescue (SWR) course aiming to produce first responders to swift water mishaps. To support the development of these basic courses, and to generate more responders, a series of Instructor development courses are also being conducted under the PEER program. The Instructors' Development courses include Training for Instructors (TFI), MFR Instructors' Workshop (MFRIW), CSSR Instructors' Workshop (CSSRIW), HOPE Training for Instructors (H-TFI), CADRE Training for Instructors and Instructors' Workshop (CADRE-TFI/IW), and Master Instructors' Workshop (MIW).

USAID/BHA provides most of the funds required to conduct the PEER courses effectively. In fact, in the earlier stages, especially Stage 1, all the funds for the PEER programs were covered by USAID/OFDA (USAID/BHA as it is known currently). However, to promote ownership and support the nationalization and institutionalization of these PEER courses, the funding has gradually shifted to partial funding by USAID/BHA, i.e., PEER Partial Funding Assistance Program (PFAP). However, depending on the nature and location of the PEER programs, some programs were fully funded by USAID/BHA even until the end of Stage 4. The PFAP program helped reduce the costs down significantly and helped encourage other institutions to adapt and institutionalize the PEER courses more efficiently.

Based on the changing time and context, the need for refresher courses was realized, to keep the past graduates up to date with the current disaster scenario, new technology, and changes in course guidelines. This gave rise to MFR, CSSR, and HOPE refresher courses. With the realization that the communities themselves needed to be better equipped in the event of disasters for search and rescue and medical emergency response, MFR and CSSR end-user courses were also designed and conducted in Stage 4. Similarly, the COVID-19 pandemic was unforeseen, and

numerous postponements and cancellations of program events followed. However, the PEER/NSET timely developed and implemented online HOPE and TFI courses as well as MFR and CSSR refresher courses during the COVID-19 pandemic.

## PEER Program Implementation

All PEER programs are initiated under the joint effort of the project team that is composed of a Chief of Party (COP), a Deputy Chief of Party (DCOP), a Lead Trainer, a Program Coordinator, and various associated office staff pertinent to completing the PEER program within schedule. An In-Country Consultant (ICC) for a specific country may also be a part of the project team in cases where the program needs to be conducted in that specific country or cases of regional programs. Similarly, for every PEER program, the project team helps decide on a PEER instructors' team, which comprises a course coordinator, a team of instructors, assistant instructors, a course monitor, and up to two observers. The instructors' team systematically and effectively conducts the courses within the specified program schedule as per the PEER guidelines. In any country, the implementing agency works closely with the ICC, a nodal agency for the countries, partner institutions, and local authorities to conduct the PEER courses. Partner agencies are usually set beforehand for each of the core PEER courses based on the requirements of the program and training centers are decided based on the available equipment at disposal.

The quality assurance for the course standards is quite elaborate, and a rigorous framework for monitoring and evaluation (M&E) of the PEER program is in place. M&E is conducted internally within the implementing agency, as well as by external agencies for a fair evaluation. Moreover, it is a continuous process that involves regular quarterly, annual, and end-stage reporting & evaluation conducted at different organizational levels. The course review procedure is also a separate standard, wherein the course participants are judged based on their individual and group performances. Feedback and suggestions are also encouraged from the participants in case they feel some parts of the courses need to be differently adapted or changed completely in the future.

PEER also maintains a comprehensive information management system accessible to all relevant stakeholders, that provides detailed information on all the past events, and even provides a list of all the graduates and instructors developed under the PEER program.

## Impact of PEER in the region

The general impact PEER has had on the countries of South and Southeast Asia should not be understated. The regional scope of PEER has expanded significantly over 23 years; PEER Stage 1 commenced in only four countries, namely India, Indonesia, Nepal, and the Philippines. PEER Stage 2 saw the introduction of Bangladesh and Pakistan into the PEER program. Cambodia, Lao DPR, Thailand, and Vietnam from Southeast Asia became part of the HOPE and CADRE programs in Stage 3. Similarly, in Stage 4, additional South Asian countries Afghanistan, Bhutan, Maldives, and Sri Lanka participated in PEER regional programs in a limited capacity. As of the end of Stage 4, a total of more than 10,400 PEER graduates have been developed in the region: 1301 graduates from Bangladesh, 1330 graduates from India, 2219 graduates from Nepal, 1378 graduates from Pakistan, more than 1500 graduates from Indonesia, and the Philippines, and a small number of graduates from countries around South and Southeast Asia that participated in regional PEER programs. These numbers do not include the thousands of community-level volunteers that have been developed in Bangladesh and Pakistan using further institutionalized programs. The member countries have felt the significance of these PEER programs in their respective countries and have institutionalized most of the PEER courses into their national and subnational disaster response training programs. Security forces have integrated the PEER courses into their training regimen, and some schools and universities have even made these PEER courses a part of their curriculum to some extent. The introduction of programs like CADRE and its institutionalization in countries like Bangladesh and Pakistan has seen them develop thousands of community-levels first responders as well. The PEER programs have helped highlight the earlier deficiencies in the National Disaster Risk Management (DRM) policies and strategies of the countries and helped reform those policies for better disaster response. The direct effect of the PEER programs in effective disaster response can be seen in several case stories where PEER graduates led the charge for disaster response in 2013 Rana Plaza Collapse in Bangladesh, 2015 Gorkha Earthquake in Nepal, Varanasi Flyover Collapse in India, 2013 Typhoon Haiyan in the Philippines, 2009 Padang Earthquake in Indonesia, and Rescue 1122/Pakistan Emergency Services being granted IEC classification from INSARAG in 2019. The success of PEER in the region has influenced the surrounding countries in the region, and they have expressed interest in integrating the PEER courses into their training institutions as well.

## Lessons Learnt and Way Forward for PEER

For more than 23 years, PEER has been a huge learning experience for most countries in the region. There has been a noticeable increase in the number of emergency responders and instructors, however full-scale institutionalization of the

PEER programs is still underway in most countries. PEER has set a robust standard for the highest quality of response training, which has been used to develop national and organizational response guidelines and standards. In addition, the level of coordination, networking, and collaboration among partner organizations and associated stakeholders within the PEER partner countries could be further improved at regional, national, and even subnational levels using joint simulation exercises, frequent seminars, and competitions which can further enhance collaboration.

It was realized that despite the strong influence of PEER in the region, the disaster response capacity of the countries is still inadequate. A lack of master instructors was observed, and the need for developing more master trainers is a must moving forward. Sharing of resources and expertise among partner organizations can have a tremendous reduction on the cost of the programs, which can help encourage more training institutions to collaborate and effectively integrate these courses into their training programs. Additionally, the national governments themselves should be more engaged in enhancing and evolving the courses by providing proper financial and technical support.

A globally recognized course accreditation system could help set a specific standard for all PEER courses, with the addition of different tiers of course depth, as well as consideration of participants of different qualities and backgrounds could help in deeper institutionalization of the courses and certification tiers would help institutions track their progress in response capacity building. The PEER courses, in their current standard and form, are time-consuming and might not be deemed suitable for participants of all skill levels. This might discourage a layman from wanting to participate in PEER programs, however, if the current courses can be modularized into smaller length modules, more participants might be willing to participate in shorter courses where they can participate in specific portions of the full course. There are also demands for the introduction of advanced search and rescue courses and courses that address the disasters related to Climate Change, or even Chemical, Biological, Radiological, and Nuclear (CBRN) disaster scenarios. The COVID-19 pandemic brought forth unforeseen problems and highlighted the vulnerabilities of the current teaching approach in PEER. However, in similar future circumstances, there needs to be a robust system in place for program planning and coordination to accommodate such circumstances, using further diversification of all current courses to include online modules in part or in full.

The full coverage of the PEER program is included in Volume I of the PEER book. It highlights the program's inception and evolution over time, as well as the program's impact and beneficiaries. PEER album, Volume II, includes a pictorial representation of the PEER program's journey.

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# List of abbreviations

| | |
|---|---|
| AADMER | ASEAN Agreement on Disaster Management and Emergency Response |
| ACDM | ASEAN Committee on Disaster Management |
| ADMPH | Association of Disaster Management and Public Health |
| ADPC | Asian Disaster Preparedness Center |
| ADRRN | Asian Disaster Reduction and Response Network |
| AFP | Armed Force of the Philippines |
| AHA | American Heart Association |
| ANDMA | Afghanistan National Disaster Management Authority |
| APEC | Asia-Pacific Economic Cooperation |
| APF | Armed Police Force Nepal |
| APSA | Amity Public Safety Academy |
| ARDEX | ASEAN Disaster Simulation Exercises |
| ARRND | Agreement on Rapid Response for Natural Disasters |
| ARTS | Awards Result Tracking System |
| ASAR | Advanced Search and Rescue |
| ASEAN | Association of Southeast Asian Nations |
| BAKORNAS | Badan Koordinasi Nasional |
| BASARNAS | Badan Search and Rescue Nasional |
| BEMR | Basic Emergency Medical Response |
| BFP | Bureau of Fire Protection |
| BHA | Bureau for Humanitarian Assistance |
| BIMSTEC | Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) |
| BNPB | Badan Nasional Penanggulangan Bencana |
| CADRE | Community Action for Disaster Response |
| CAPF | Central Armed Police Forces |
| CBDRM | Community Based Disaster Risk Management |
| CBRN | Chemical, Biological, Radiological and Nuclear |
| CERG | Coalition of Emergency Response Groups |

| | |
|---|---|
| CISF | Central Industrial Security Force |
| COP | Chief of Party |
| CPM | Country Planning Meeting |
| CPR | Cardiopulmonary Resuscitation |
| CRED | Center for Research on the Epidemiology of Disasters |
| CRW | Course Review Workshop |
| CSAR | Community Search and Rescue |
| CSSR | Collapsed Structure Search and Rescue |
| CSSRIW | Collapsed Structure Search and Rescue Instructors' Workshop |
| CVA | Cerebral Vascular Accidents |
| DAT | Damage Assessment Training |
| DCOP | Deputy Chief of Party |
| DDM | Department of Disaster Management |
| DDMCU | District Disaster Management Coordination Units |
| DMRS | Disaster Monitoring and Response System |
| DREF | Disaster Relief Emergency Fund |
| DRR | Disaster Risk Reduction |
| DRRM | Disaster Risk Reduction and Management |
| DRRMA | Disaster Risk Reduction and Management Act |
| EAS | Emergency Ambulance Service |
| EERC | European Emergency Response Capacity |
| EMDAT | Emergency Events Database |
| EMS | Emergency Medical Services |
| EOC | Emergency Operation Center |
| EPWG | Emergency Preparedness Working Group |
| ERAT | Emergency Rapid Assessment Teams |
| ERCC | European Commission's Emergency Response Coordination Center |
| ERUF | Emergency Rescue Unit Foundation |
| FNTI | Fire National Training Institute |
| FSCD | Fire Service and Civil Defense |
| GFDRR | Global Facility for Disaster Reduction and Recovery |
| GLOF | Glacial Lake Outburst Flood |

| | |
|---|---|
| HAZMAT | Hazardous Materials |
| HEICS/HICS | Hospital Emergency Incident Command System |
| HFA | Hyogo Framework for Action |
| ICC | In-Country Consultant |
| ICS | Incident Command System |
| IDRL | International Disaster Relief and Initial Recovery Assistance |
| IEC | INSARAG External Classification |
| IFRC | International Federation of Red Cross and Red Crescent Societies |
| IMA | Indian Medical Association |
| IMS | Information Management Specialist |
| INSARAG | International Search and Rescue Advisory Group |
| IOM | Institute of Medicine |
| IRG | International Resources Group |
| ITBP | Indo-Tibetan Border Police |
| JHU/CIEDRS | John Hopkins University – Center for International Emergency, Disaster and Refugee Studies |
| LAC | Latin America and Caribbean |
| MCI | Mass Casualty Incident |
| MDFRD | Miami Dade Fire Rescue Department |
| MENA | Middle East and North Africa |
| MFB | Mumbai Fire Brigade |
| MFR | Medical First Responder |
| MFRIW | Medical First Responder Instructors' Workshop |
| MHA | Ministry of Home Affairs |
| MIW | Master Instructors' Workshop |
| MMDA | Metro Manila Development Authority |
| MNDF | Maldives National Defense Force |
| MOCHA | Ministry of Home and Cultural Affairs |
| MPS | Maldives Police Service |
| MRC | Maldives Red Crescent Society |
| NCDM | National Council for Disaster Management |
| NDCC | National Disaster Coordinating Council |

| | |
|---|---|
| NDMA | National Disaster Management Authority |
| NDMC | National Disaster Management Council |
| NDMO | National Disaster Management Organization |
| NDRF | National Disaster Response Force |
| NDRMF | National Disaster Risk Management Framework |
| NDRRMA | National Disaster Risk Reduction and Management Authority |
| NDRRMC | National Disaster Risk Reduction and Management Council |
| NEOC | National Emergency Operation Center |
| NGO | Non-governmental Organization |
| NHEPRN | National Health Emergency Preparedness and Response Network |
| NISA | National Industrial Security Academy |
| NPDM | National Plan for Disaster Management |
| NRCS | Nepal Red Cross Society |
| NSET | National Society for Earthquake Technology |
| OCD | Office of Civil Defense |
| UNOCHA | United Nations Office for the Coordination of Humanitarian Affairs |
| OFDA | Office of US Foreign Disaster Assistance |
| PDMA | Provincial Disaster Management Authority |
| PDR | People's Democratic Republic |
| PEER | Program for Enhancement of Emergency Response |
| PES | Punjab Emergency Services |
| PFAP | Partial Funding Assistance Program |
| PICE | Potential Injury Causing Events |
| PRCS | Philippine Red Cross |
| RPM | Regional Planning Meeting |
| SAARC | South Asian Association for Regional Cooperation |
| SAR | Search and Rescue |
| SDMC | SAARC Disaster Management Center |
| SEC | State Emergency Committees |
| SEEDS | Sustainable Environment and Ecological Development Society |
| SERB | Strengthening Earthquake Resilience in Bangladesh |
| SFDRR | Sendai Framework for Disaster Risk Reduction |

| | |
|---|---|
| SOD | Standing Order on Disasters |
| SPW | Strategic Planning Workshop |
| SSI | Safety Solutions Incorporated |
| START | Simple Triage and Rapid Treatment |
| SWR | Swift Water Rescue |
| TFI | Training for Instructors |
| TIEMS | International Emergency Management Society |
| UNDAC | United Nations Disaster Assessment and Coordination System |
| UNDRR | United Nations Office for Disaster Risk Reduction |
| USAID | United States Agency for International Development |
| USAR | Urban Search and Rescue |
| USGS | United States Geological Society |
| WCDR | World Conference on Disaster Reduction |

# 1 INTRODUCTION

Disasters caused by earthquakes, floods, landslides, drought, and other natural hazards have continuously wreaked damages around the globe to human lives and properties alike while dealing huge economic losses in the order of billions of dollars every year. As per the database maintained by the Emergency Events Database (EM-DAT: *www.emdat.be*), a global disaster database maintained by the Center for Research on the Epidemiology of Disasters (CRED: *www.cred.be*) in Brussels, more than 600 disaster events are recorded globally each year, with the increasing trend of frequency. The effect of such disasters is seen mostly in developing countries where they pose a major risk for the poorer population, and most of the recent developmental progress and economies regress decades behind [1].

In the last 20 years (2000–2019), more than 4 billion people have been affected by 7,348 disaster events that were recorded globally (UNDRR and CRED, 2020). An estimated 1.23 million lives were lost, and global economic losses amounted to around USD 2.97 trillion. The increased prevalence of extreme weather events, which are often fueled by climate change, and the occurrences of other hazards, are displacing millions of people annually, eroding resilience and deepening poverty (ibid.). In 2019 alone, around 1,900 disasters brought on 24.9 million new displacements in 140 countries and territories across the world (Internal Displacement Monitoring Center (IDMC), 2020). This represents the highest number of displacements recorded since 2012 and is three times the number of displacements induced by conflict and violence (ibid.). By the end of 2019, approximately 5.1 million people in 95 countries and territories were living in situations of displacement due to disasters that had occurred that year or in previous years (ibid.). Around 3.8 million square kilometers of Earth's land area and more than 100 million people are relatively highly exposed to three or more hazards. Geophysical hazards like earthquakes and volcanoes tend to cluster along the major global fault boundaries, characterized by mountainous terrain. Hydro-meteorological hazards like floods, cyclones, and landslides have been shown to affect the eastern coastal regions of major continents as well as some interior regions of North and South America, Europe, and Asia. Drought seems to be more widely distributed across the semiarid tropics. The areas that are subject to both geophysical and hydro-meteorological hazards fall primarily in East and South Asia, Central America, and western South America. These areas are more densely

populated and are rapidly developing regions, which implies a huge potential for human casualties and economic losses as well [1].

Especially in the cases of developing countries with emerging economies, any large-scale disaster can have a sustained negative effect on their economies in addition to the losses bore directly from the disaster. The countries and regions that possess the highest disaster risks are relatively less developed and not well set up for emergency response after the disaster. Setting up proper Disaster Risk Reduction and Management (DRRM) strategies could go a long way in alleviating the negative impact of the disaster and help the affected country recuperate much sooner after the event. Effective governance structure and mechanism are the keys to the success of DRRM, which requires awareness, political will, and adequate resources. The United Nations Office for Disaster Risk Reduction (UNDRR) and the World Bank, through its Global Facility for Disaster Reduction and Recovery (GFDRR), and United States Agency for International Development (USAID) are some of the key international organizations supporting countries develop national DRR policy plans and platforms [2]. Based on prior disaster risk assessments, DRRM strategies are formulated with the consensus of a wide range of stakeholders to help guide risk identification, mitigation, preparedness, and response [2].

Several states met at the World Conference on Natural Disaster Reduction, in the city of Yokohama, Japan, in May 1994, in partnership with non-governmental organizations, and with the participation of international organizations, the scientific community, business, industry and the media, deliberating within the framework of the International Decade for Natural Disaster Reduction, expressed their deep concern for the continuing human suffering and disruption of development caused by natural disasters, and inspired the Yokohama Strategy and Plan of Action for a Safer World [3].

The UN's World Conference on Disaster Reduction (WCDR) in Kobe, Japan, in 2005, began pushing international agencies and national governments towards setting clear targets and commitments for DRR and making major DRR policy introduction and changes. The Hyogo Framework for Action, 2005-2015 (HFA) is the key instrument for implementing disaster risk reduction, adopted by the Member States of the United Nations. It was the first internationally accepted framework for DRR. It set out a well-organized sequence of objectives (outcome – strategic goals - priorities), with five priorities for action attempting to accommodate the main areas of DRR intervention: (1) Make Disaster Risk Reduction a Priority; (2) Know the Risks and Take Action; (3) Build Understanding and Awareness; (4) Reduce Risk; and (5) Be Prepared and Ready to Act [4].

The Sendai Framework for Disaster Risk Reduction, 2015–2030 (SFDRR) is an international document adopted by the United Nations member states between 14 and 18 March 2015 at the World Conference on Disaster Risk Reduction held in Sendai, Japan, and endorsed by the UN General Assembly in June 2015. It is the successor agreement to the HFA. The Sendai Framework has set four Priorities for Action: (1) Understanding Disaster Risk; (2) Strengthening disaster risk governance to manage disaster risk; (3) Investing in disaster risk reduction for resilience; and (4) Enhancing disaster preparedness for effective response, and to "Build Back Better" in recovery, rehabilitation, and reconstruction [5].

World Risks Report 2020 calculated disaster risks for each country based on 4 components:

- Exposure to earthquakes, storms, floods, drought, and sea-level rise
- Susceptibility depending on infrastructure, food supply, and economic framework conditions
- Coping capacities depending on governance, health care, social and material security
- Adaptive capacities related to upcoming natural events, climate change, and other challenges

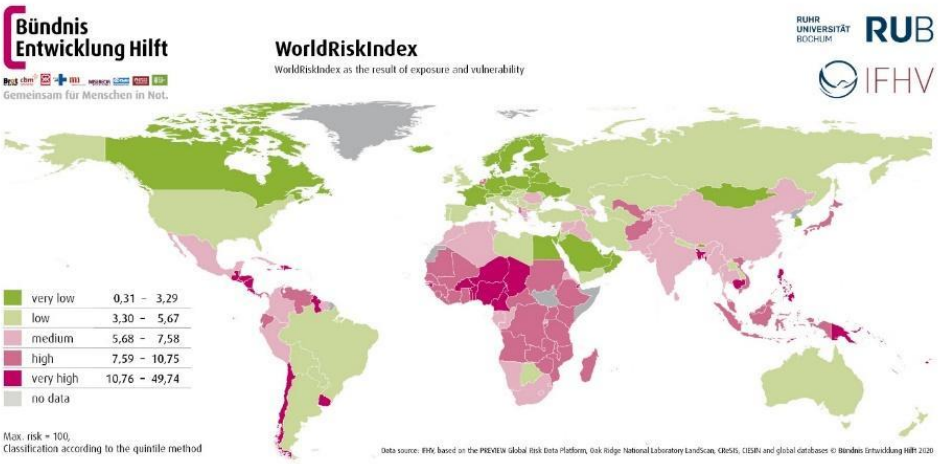



Figure 1: World Disaster Risk Index

Source: World Risk Report 2020

The areas under the most risk in the globe based on World Risks Report 2020 are depicted in Figure 1. We can observe that most of the Asia-Pacific, the Caribbean and Latin America, and Africa possess huge risks of disasters. There are many

national and international agencies working tirelessly to reduce the overall global risk of disasters, which shall be discussed in the next section.

## 1.1 Global Emergency Preparedness and Response Capacities

First responders to disasters are almost always the local inhabitants, and every nation prepares in response to major disasters. While some countries might seem to be very well prepared for disasters, it cannot be denied that they might require additional assistance from other countries in case the scale of the disaster exceeds their capabilities. Many organizations have been founded and countless international agreements have been made between countries to make cross-border collaboration in various areas, such as providing and receiving assistance in the event of a disaster. Regional and international cooperation is of paramount importance to cope with the impacts of a disaster as well as to sustain economic growth in the affected region. This section shall provide a brief overview of the global organizations and agreements that are in place, to provide needed support in emergency response in the form of direct dispatch of response teams, or even providing training locally for emergency disaster response [6].

In the case of the United Nations, the preparation and response in the event of disasters are initially coordinated by the UN Office for the Coordination of Humanitarian Affairs (UN OCHA). UN OCHA works in collaboration with the affected country/region, to coordinate large-scale international assistance activities and the flow of funds after a disaster. UN OCHA has a well-coordinated structure and specific systems in place such as the UN Disaster Assessment and Coordination System (UNDAC). The UNDAC team is an OCHA tool used for deployment primarily to sudden-onset emergencies. UN OCHA also coordinates the deployment of UN classified Urban Search & Rescue (USAR) teams by the UN International Search and Rescue Advisory Group (INSARAG). Furthermore, OCHA also maintains an Emergency Cash Grant as an emergency relief grant that can be quickly dispersed in a sudden-onset disaster. The grant represents a relatively small number of resources from the UN's regular budget and is disbursed for pressing relief activities in the immediate aftermath of a disaster [6], [7].

INSARAG is a network of countries that are either prone to disasters or act as responders to disasters and includes organizations that are dedicated to USAR and operational field coordination. It was established in 1990 to facilitate the coordination between the international USAR teams who make themselves available for deployment to countries experiencing devastating events of structural

collapse due primarily to earthquakes. Since its establishment, INSARAG has been constantly evolving and adapting its globally recognized and accepted quality standards and methodologies to save more lives. Any USAR Team having the mandate to deploy internationally is eligible to apply for an INSARAG External Classification (IEC), provided it has the endorsement of its Member State's INSARAG Policy Focal Point. Upon successful completion of an IEC, classified USAR Teams are included in the USAR Directory at the classification level achieved. The guidelines developed by INSARAG for USAR operations have been the standard for emergency response in urban environments prone to disasters and have been followed by many countries and USAR teams despite not being a Member State or without yet possessing IEC classification. In this context, Collapsed Structure Search and Rescue (CSSR) courses for search and rescue operations being conducted by Program for Enhancement of Emergency Response (PEER) in the Asian region and INSARAG guidelines or USAR possess various common elements [8].

Likewise, the American Heart Association (AHA) Guidelines for Cardiopulmonary Resuscitation (CPR) and Emergency Cardiovascular Care provide a comprehensive standard medical procedure when attending to health emergencies. These guidelines have been referenced in many disaster response guidelines as standards for emergency Medical First Responders' courses including the Medical First Responders' (MFR) course conducted by PEER.

The International Federation of Red Cross and Red Crescent Societies (IFRC) has set up a Guideline for the Domestic Facilitation and Regulation of International Disaster Relief and Initial Recovery Assistance (also known as IDRL Guidelines). IDRL Guidelines are a set of recommendations that seek to assist governments in preparing national legal frameworks for international disaster relief operations. The guidelines address issues including requesting and receiving international assistance; issuing visas and work permits to international humanitarian personnel; customs clearance of relief items; taxation; and obtaining domestic legal personality or legal status. IFRC Disaster Relief Emergency Fund (DREF) is an emergency response fund that provides immediate financial support to Red Cross and Red Crescent National Societies, enabling them to carry out their unique role as first responders after a disaster [7].

The European Union has stepped up its preparedness to respond to disasters by developing a European Emergency Response Capacity (EERC), which brings together a range of relief teams, experts, and equipment that the Member States keep on standby for EU civil protection missions all over the world. As of 2015, a total of 30 different teams, including search and rescue teams, field hospitals and medical labs, forest fire fighting aircraft, flood rescue and containment modules,

medevac planes, and many others are a part of EERC. A rigorous certification process is put in place to ensure quality and interoperability. In times of increasing disaster risks, the EERC allows for a more predictable, faster, and coherent EU response to disasters. It also facilitates better planning and coordination at European and national levels. The European Commission's Emergency Response Coordination Center (ERCC) serves as the main coordination hub for the deployment of teams [9].

The International Emergency Management Society (TIEMS) was founded in Washington, D.C., and is today registered as an international, independent, nonprofit NGO in Belgium. It is an international network of users, planners, researchers, industry, managers, response personnel, practitioners, social scientists, and other interested parties and individuals concerned with emergency and disaster management. It stimulates the exchange of information regarding the use of innovative methods and technologies within emergency and disaster management, to improve society's ability to avoid, mitigate, respond to, and speedily recover from natural and technological disasters. TIEMS is building a network of experts through local TIEMS chapters all over the world, to "think globally and act locally." TIEMS chapters are self-governed entities within the TIEMS framework. Today, chapters are established in Italy, Iraq, Romania, Belgium/Netherlands/Luxembourg, India, Finland, the Middle East, and North Africa (MENA), Japan, Korea, and China [10].

Global Facility for Disaster Reduction and Recovery (GFDRR) is a global partnership that helps developing countries better understand and reduce their vulnerability to natural hazards and climate change. GFDRR is a grant-funding mechanism, managed by the World Bank that supports disaster management projects worldwide. GFDRR is supported by 37 countries and 11 international organizations and works with over 400 sub-national, national, regional, and international partners [11].

## 1.2 Emergency Response Capacity in Asian Countries

This section shall discuss the intergovernmental organizations in the Asia-Pacific region that offer an array of humanitarian tools and services to corresponding member states and participating states.

The Association of Southeast Asian Nations (ASEAN) established the ASEAN Committee on Disaster Management (ACDM) in 2003, which assumes overall responsibility for coordinating and implementing regional disaster management activities for the 10 ASEAN Member States. ACDM constitutes the heads of National Disaster Management Organizations (NDMO) of all ASEAN member countries. Agreement on Disaster Management and Emergency Response

(AADMER) is a legally binding regional multi-hazard and policy framework for cooperation, coordination, technical assistance, and resource mobilization in all aspects of disaster management in the 10 ASEAN countries. AADMER aims to provide an effective mechanism to achieve a substantial reduction of disaster losses in lives and social, economic, and environmental assets, and to jointly respond to emergencies through concerted national efforts and intensified regional and international cooperation. Established in 2011, the ASEAN Coordinating Center for Humanitarian Assistance on Disaster Management (AHA Center) is responsible for the operational coordination of all activities envisaged under the AADMER. ASEAN Disaster Monitoring and Response System (DMRS) and the ASEAN Disaster Information Network (ADInet) provide monitoring services and disaster information to NDMOs through web-based facilities. ASEAN Emergency Rapid Assessment Teams (ERAT) are a pool of trained and rapidly deployable (within 24 hours) experts on emergency assessment, for disasters in ASEAN countries [7].

South Asian Association for Regional Cooperation (SAARC) adopted the SAARC Comprehensive Framework on Disaster Management in 2006, establishing the SAARC Disaster Management Center (SDMC). SDMC's mandate is to establish and strengthen the South Asia regional disaster management system as a tool to reduce risks and improve response and recovery. SDMC is envisaged to function under the auspices of the SAARC Agreement on Rapid Response for Natural Disasters (ARRND) treaty to improve and maintain regional standby arrangements, among other cooperative mechanisms, for disaster relief and emergency response. SAARC ARRND is a regional disaster management agreement that reinforces existing mechanisms for rapid response to disasters. ARRND obliges SAARC member states to take legislative and administrative measures to implement agreement provisions. These include measures for requesting and receiving assistance; conducting needs assessments; mobilizing equipment, personnel, materials, and other facilities; making regional standby arrangements, including emergency stockpiles; and ensuring quality control of relief items [7].

Asia-Pacific Economic Cooperation (APEC) is a forum of 21 Pacific Rim economies that seeks to promote free trade and economic cooperation. APEC also hosts an Emergency Preparedness Working Group (EPWG) mandated to coordinate and facilitate emergency and disaster preparedness within APEC. EPWG is focused on reducing the risk of disasters and building business and community resilience through knowledge sharing and collaboration among its 21 member economies. EPWG has developed a Strategy for Disaster Risk Reduction and Emergency Preparedness and Response in the Asia-Pacific Region 2009-2015, which guides its activities in this area [7].

The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) is a regional organization formed in 1997 by seven member states located along the littoral and adjacent areas of the Bay of Bengal. Although with a history of more than 23 years, BIMSTEC is still at a nascent stage in terms of contribution and efforts towards disaster management. The focus within BIMSTEC, so far, has been on early warning systems and disaster management exercises. The first Annual Disaster Management Exercise was implemented by BIMSTEC in 2017 with field training exercises on earthquake and flood, and subsequent review being the major agenda of the exercise. The second Disaster Management Exercise was held in 2020, and it evaluated existing capabilities, strengthened regional response mechanisms, and conducted a risk assessment of cultural heritage sites in the context of flood disasters due to cyclones [12].

In addition to the cooperative agreements between countries, there are several Non- Governmental Organizations (NGOs) and International NGOs operating in emergency preparedness and response in the Asia-Pacific region. 48 national NGOs from 18 countries participate in a consortium called the Asian Disaster Reduction and Response Network (ADRRN). ADRRN promotes the coordination and sharing of information among NGOs and other stakeholders for effective disaster reduction and response [15].

The Philippines has some of the strongest set of policies, frameworks, and plans for disaster risk reduction (DRR) in Asia, through which work on resilience can be grounded. The key law is the Philippine Disaster Risk Reduction and Management Act of 2010 (DRRM Law). The DRRM Act establishes local councils at the regional, provincial, municipal, and community levels that replicate the National Disaster Risk Reduction and Management Council's (NDRRMC) responsibilities; however, these local councils are often understaffed, or lacking professionalization and a significant gap exists as the NDRRMC cannot supervise all the local councils. Local political leaders' support of disaster management, local appreciation of the importance of disaster management, funding, and training, and support from the national government determine the effectiveness of the local council [16]. The disaster focal points are the NDRRMC and the Office of Civil Defense (OCD). The Department of Social Welfare and Development (DWSD) is responsible for leading immediate disaster relief efforts [17].

After the devastating 2004 Indian Ocean Tsunami, the Indonesian Government reformed its disaster risk management laws, policies, and institutions significantly. The Government of Indonesia has contingency plans in place for every disaster-prone city which identifies its vulnerabilities and outlines the relief response while building overall preparedness. A disaster management bill was introduced in 2007 that

incorporated disaster prevention into disaster management response. In 2008, Indonesia created the National Disaster Management Agency (Badan Nasional Penanggulangan Bencana, BNPB). The new shift strengthened the country's disaster management agency and the addition of district branches and representatives. Under Indonesia's 2007 Disaster Management Law, provincial and district administrations are mandated to head disaster management during a crisis. However, the BNPB and the military are prepared to step in when requested [18].

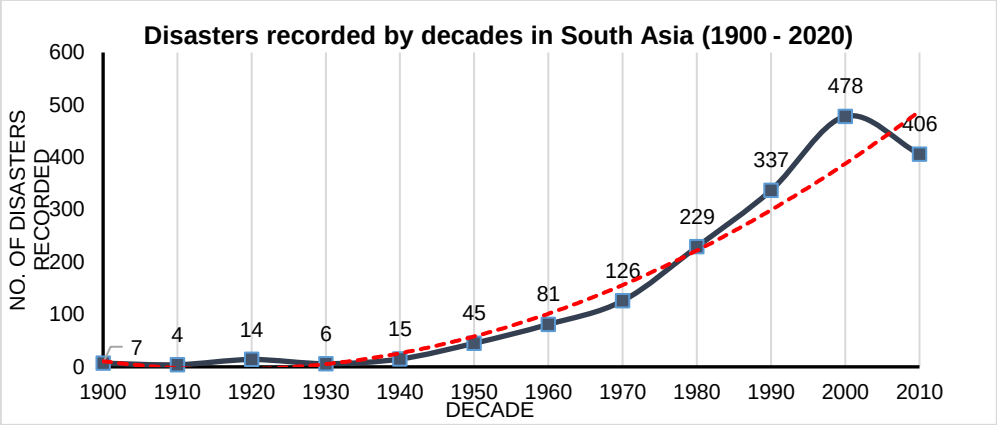
Asian Disaster Preparedness Center (ADPC) is a regional resource center working to build safer communities and sustainable development through disaster reduction in Asia and the Pacific. Established in 1986, it is recognized as an important neutral focal point for promoting disaster awareness and the development of local capabilities to foster institutionalized disaster management and mitigation policies in Asia and the Pacific [13].

Similar to ADPC, The National Society for Earthquake Technology Nepal (NSET-Nepal) was founded in 1993 by a group of professionals with the main objective "to foster the advancement of science and practice of earthquake engineering and technology for mitigating the earthquake risk and increasing the seismic safety, to enhance professionalism, professional engineering, and scientific ethics and to further the objectives of the International Association for Earthquake Engineering as applicable to Nepal". Bringing "substantial change in the application of technology to the many facets of earthquake disaster management for saving the lives of the people" has remained the guiding philosophy of NSET ever since its inception. Today, NSET is the foremost non-governmental institution working on earthquake risk management in the country and the region. Its seismic risk reduction activities are now being carried out in various parts of the world. Moreover, NSET has expanded its scope working in multi-hazard risk management and has been actively involved in implementing the Program for Enhancement of Emergency Response in the Asia-Pacific region, a regional training program set up to enhance disaster response capacities in the countries with high seismic vulnerability in the region [14].

## 1.3 Evolution of Disaster Risk Management in South Asia

South Asia has one of the most vulnerable populations to have impacts of hazard events [1], [19]. Between 1900 and 2020, South Asia has experienced around 1,800 natural disasters that meet the criteria of EMDAT. Cyclones, earthquakes and related tsunamis, extreme precipitation during monsoon rains, droughts, landslides, and Glacial Lake Outburst Floods (GLOFs) are all very common natural hazards in the region. Geography in the South Asian region is very diverse, ranging from high

elevations in the Himalayas to long coastlines formed by the Arabian Gulf, the Indian Ocean, and the Bay of Bengal. These distinct features create diverse geography including glaciers, rainforests, valleys, deserts, and grasslands.




The increasing number of disasters in the region in recent years (see Figure 2) has accelerated the formulation of DRR policies and emergency response capabilities of the countries in the region. In the following section, we discuss some of the disaster management policies/frameworks put in place in recent years in some of the countries in the region.

## Islamic Republic of Afghanistan

Islamic Republic of Afghanistan has set up the Afghanistan National Disaster Management Authority (ANDMA) as the principal institution/nodal agency at the national level and is mandated to coordinate and manage all aspects of disaster mitigation, preparedness, and response through its national and provincial offices [20]. Furthermore, Afghanistan has developed key policy documents such as the Disaster Management Framework, National Strategy for Disaster Management, and National Disaster Management Plan. The National Disaster Management Commission has been established as well, under the leadership of the President of Afghanistan [20]. The National Disaster Management Law was promulgated in 2012 for the management of natural and unnatural disasters in Afghanistan. The law states specific objectives, implementing agencies and types of disasters in the country, as well as emphasizes the funding arrangements for disaster management, and coordination with international agencies for disaster response [21].

## People's Republic of Bangladesh

People's Republic of Bangladesh has made significant progress in disaster preparedness and mitigation in the last several decades, which can be observed statistically in the reduction of the death toll from tropical cyclones from hundreds of thousands down to just hundreds of people. Disaster Management in Bangladesh is guided by several plans, policies, and orders put in place by the Government of Bangladesh. The National Disaster Management Plans (NDMPs) observe the risks and consequences of disasters and community involvement and integration of structural and non-structural measures. The Disaster Management (DM) Policy 2015 emphasizes the financial resources required for DM activities at all governmental levels. The Disaster Management Act 2012 endorses the Standing Orders on Disaster (SOD)-2019, which provides a legal basis. The Ministry of Disaster Management and Relief (MoDMR) is responsible for the coordination of national DM efforts and the National Disaster Management Council (NDMC) is the uppermost authority for providing the overall direction, which is translated in the National Plan for Disaster Management (NPDM 2016-2020) [22]. After the Nepal Earthquake in 2015, the Government of Bangladesh established a National Emergency Operation Center (NEOC) as a coordination mechanism for disaster response [23].

## Bhutan

In Bhutan, there were no specific policies or guidelines related to disaster risk management when the National Disaster Risk Management Framework (NDRMF) was adopted by the Royal Government of Bhutan. The need for a systematic DRM approach was observed based on the increasing frequency of disasters across the country, which led to the enactment of the Disaster Management Act of Bhutan 2013. The Department of Disaster Management (DDM), Ministry of Home and Cultural Affairs is the Secretariat of National Disaster Management Authority (NDMA), and NDMA is the uppermost agency responsible for decision making on disaster management in Bhutan [24].

## India

In India, the Disaster Management Act 2005 provides the legal and institutional framework for disaster management in India at national and sub-national levels. The Ministry of Home Affairs (MHA) has assumed overall responsibility for disaster management along with India's National Disaster Management Authority (NDMA). The national disaster management structure includes the National Executive Committee (NEC), which assists the NDMA with overseeing national disaster

management activities; the Central Government which maintains the authority to issue guidelines to NEC, and State Governments and State Emergency Committees (SECs) to enable or aid in disaster management. All central ministries are involved in post-disaster recovery activities. Both the national and the state governments are jointly responsible for undertaking response, relief, rehabilitation, preparedness, mitigation, and response measures [25].

## Republic of Maldives

The Republic of Maldives's national-level emergency response is led and coordinated by the National Disaster Management Authority (NDMA, formerly the National Disaster Management Center (NDMC)). NDMA is supported by the Maldives National Defense Force (MNDF), Maldives Police Service (MPS), and the Maldivian Red Crescent Society (MRC). The local administrations, however, are the first line of response at the atoll and island levels. The NDMA aspires to mainstream disaster risk reduction at the national level. Under the 2015 Disaster Management Act (DMA), NDMA's overarching objective is to minimize the impact of disasters, and preparations are being made to establish a modern Emergency Operations Center (EOC). Additionally, the Maldives has a Community Based Disaster Risk Management (CBDRM) Program run by NDMA as part of efforts to reduce risks and increase disaster preparedness and resilience [26].

## Nepal

In Nepal, the Government of Nepal (GoN) has developed various legal and institutional arrangements of Disaster Risk Reduction, Response, and Management activities. Currently, Nepal's landscape of disaster governance is guided by the Constitution of Nepal 2015 and Disaster Risk Reduction and Management Act (DRRMA) 2017. The DRRMA 2017 sets out formal structures, roles, and responsibilities at federal, provincial, district, and local levels. At the federal level, there is a provision for a DRRM National Council, Executive Committee, and National Disaster Risk Reduction and Management Authority (NDRRMA). NDRRMA functions under the Ministry of Home Affairs (MoHA). MoHA is leading the ongoing efforts to operationalize the NDRRM Act. The Act also specifies DRRM functions for each local government with a structured Disaster Management Committee in conjunction with the Local Government Operation Act 2017. The Government of Nepal has endorsed a National Disaster Risk Reduction Policy 2018 and Disaster Risk Reduction National Strategic Action Plan 2018-2030, which provides a comprehensive planning framework for disaster risk reduction and management in Nepal, which encompasses different priority areas and guiding

government actors and stakeholders to achieve targets by adopting appropriate processes [27].

## Pakistan

The Government of Pakistan has a strong foundation for disaster management built around the National Disaster Management Authority (NDMA), the Provincial Disaster Management Authorities (PDMAs), and national legislation from 2010. The Government of Pakistan has well-established national development and disaster risk reduction frameworks, which includes the Pakistan Vision 2025, the National Disaster Management Plan (NDMP) 2012-2022, the National Disaster Response Plan 2019, and the National Flood Protection Plan (IV) (NFPP-IV) 2015-2025. The United Nations and other humanitarians work closely with the NDMA, PDMAs, Line Ministries, and the National Disaster Risk Management Fund (NDRMF) in support of these government initiatives [28].

## Sri Lanka

Sri Lanka has increased its efforts to build a multi-hazard disaster management infrastructure since the 2004 Indian Ocean tsunami, which have led to reforms including the Disaster Management Act of 2005 and the establishment of the National Council for Disaster Management (NCDM) and its operative office, the Disaster Management Center (DMC). The DMC is mandated with the responsibility to implement and coordinate national and sub-national level programs for reducing the risk of disasters with the participation of all stakeholders. DMC's main activities are Research and Development, Mitigation, Planning Preparedness, Dissemination of Early Warning for vulnerable populations, Emergency Response, Coordination of Relief, and Post Disaster Activities in collaboration with other key agencies. There are also Disaster Management Committees at District, Divisional, and Grama Niladhari Wasams levels across the country. District Disaster Management Coordination Units (DDMCU) were also established in all districts to carry out Disaster Risk Reduction (DRR) activities at the sub-national level. The National Emergency Operation Center (EOC) coordinates all response agencies in the event of a disaster [29].

With the frequency and intensity of disasters expected to rise as climate change concerns deepen, local communities must prepare for more severe disaster events. The key to fighting disasters, of course, lies in mitigating the risks associated with those disasters rather than reacting to the disasters. A heavier prioritization on mitigation, prevention, and preparedness against disasters is better economically, socially as well as from a humanitarian standpoint to save more lives.

Instructors demonstrating heavy load lifting and moving skill during CSSR

# 2 HISTORY OF PEER

The contents of this chapter are about the origin of the concept of PEER, and how that concept traversed across various regions to finally take the current form of PEER. It further highlights the progression of PEER through its various stages and their corresponding goals.

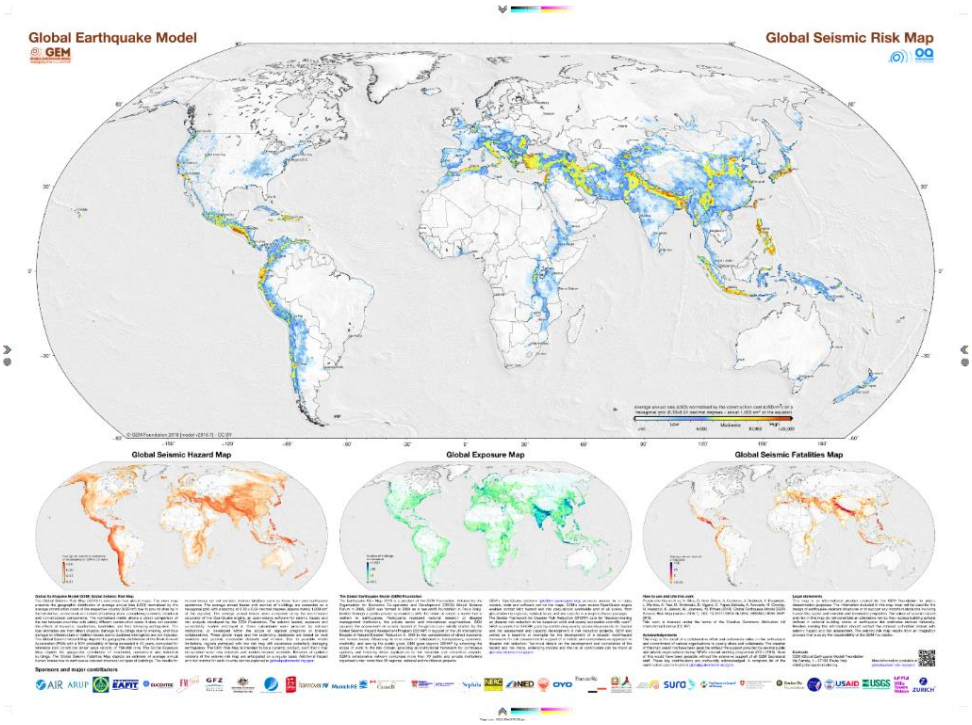



Figure 2: Figure Global Earthquake Risk Map

Source: Global Earthquake Model (GEM)

## 2.1 Origin of PEER concept and transfer to Asia

Historical data and experience have shown that the application of timely and effective search and rescue (SAR) activities by the first responders can help significantly reduce human casualties and injuries in immediate post-disaster scenarios. The first 24 hours following a disaster are critical for ensuring high survival rates, with around 80% of those rescued within the first 24 hours surviving, and

unfortunately, the survival rates rapidly decline after those first 24 hours [14]. Highly competent rescue teams are not available on-demand, and it is sensible to expect international assistance teams to arrive 24 hours after the disaster only. Thus, countries must rely on their disaster response capabilities the most when it comes to maximizing the survival rates post-disasters. This critical time after every disaster makes the transfer of SAR skills to the population of disaster-prone areas in the regions paramount to ensure the presence of trained individuals at hand immediately after the disasters strike.

Much of Asia is exposed to the hazards like earthquakes (refer to Figure 2), and at the time many Asian countries had not yet systematically developed timely emergency medical and SAR capabilities during times of emergency, to the extent necessary to significantly reduce the loss of lives and injuries. The need for improved search and rescue (SAR) capabilities in seismically active countries of Asia had long been realized, and consequently, in 1997, the USAID/OFDA expressed interest in assisting the process of capacity building for Urban Search and Rescue in four countries: India, Indonesia, Nepal, and the Philippines. OFDA approached the Asian Disaster Preparedness Center (ADPC) to provide project support and the Miami-Dade Fire Rescue Department (MDFRD) to provide technical input to the capacity-building program. ADPC had a pre-existing relationship with emergency response organizations in each country which formed the foundation of PEER partner networks.

MDFRD is recognized as a model for Fire Suppression, Emergency Medical Services, Search and Rescue, and other specialized areas. At OFDA's request, MDFRD initiated the disaster first responder training in Latin America and the Caribbean in 1983.

The concept of PEER first arose in the form of the Disaster Preparedness and Response Program through a grant agreement between the Miami-Dade Fire Rescue Department and the Office of U.S. Foreign Disaster Assistance, OFDA (now known as the Bureau of Humanitarian Assistance, BHA) of the United States Agency for International Development (USAID), of the Federal government of the United States of America. The program was undertaken in response to the request for assistance made by disaster preparedness and response agencies and institutions in Latin American and Caribbean countries, which led to the development of courses and materials to better prepare these agencies and institutions for more efficient disaster mitigation.

USAID/Bureau for Humanitarian Assistance (BHA, previously known as OFDA) provided support to ensure that disaster experts are ready to be immediately deployed to disaster-affected areas throughout the Latin American and the

Caribbean (LAC) region. Disaster experts from USAID/BHA have been working in close coordination with host governments and disaster management agencies in the LAC region, and the USAID/BHA regional office has responded to a variety of disasters in the LAC region over more than 30 years since its establishment in 1989. Moreover, the USAID/BHA regional office also supports disaster risk reduction programs that help mitigate disaster risk, prepare vulnerable communities for disasters before they strike, and reduce the social and economic impact of emergencies. The regional office also supports early warning systems for volcanic eruptions and tsunamis and maintains technical experts in areas of Urban Search and Rescue, the Incident Command System (ICS), Emergency Operations Center Management, Disaster Preparedness, Forest Fire Control and Prevention, and Disaster Risk Reduction Education Programs. USAID/BHA has prepared training programs – comprising more than 20 courses – that build upon the capacity of local and national entities in disaster management, first response, and disaster risk reduction. Established in 1989, the regional training program has trained more than 85,000 people and certified approximately 7,500 instructors in 32 countries. These USAID/BHA-trained instructors currently conduct disaster response training in their own countries using local resources, while some have also assumed leadership responsibilities in national disaster management agencies and institutions around the LAC region [30], [31].

The same Disaster Preparedness and Response Program was expanded to disaster prone countries of Asia with similar objectives as for the Latin American and Caribbean countries, i.e., to assist the response agencies and institutions in preparing them for effective and efficient disaster mitigation. The program design followed the principles and methodology of BHA's training programs for Latin America, which began in 1983, and the Caribbean and South Pacific, which began in the early 1990s.

PEER thus began in October 1998 as a long-term multi-phase initiative to collaborate with partners in India, Indonesia, Nepal, and the Philippines, countries where earthquakes had taken the lives of over 91,000 people over the twentieth century according to the estimates of the US Geological Survey (USGS), a bureau of the US Department of Interior. Also, the governments of these specific countries showed great interest in participating in the PEER program.

A visit by Asian experts to the similar training system of Latin America convinced them of the importance of the SAR training approach and the corresponding potential for applying a similar training approach to their regional programs to save human lives in the event of a disaster.

The BHA program methodology is guided by the following principles and strategic approaches:

- Performance and objective-based training,
- Training of local instructors to generate a multiplier effect,
- Locally produced, adapted, and translated materials and courses,
- Use of interactive training methods, and
- Local community level target audience.

## 2.2 Timeline of PEER stages

Over many years, PEER has been constantly evolving and has been run under the collaboration and effort of multiple agencies, with a focus on various objectives at different stages designed to strengthen disaster response capacities in Asia. We shall discuss the timeline of the various stages of the PEER program and briefly detail their regional coverage and goals.

PEER Stage I was implemented over the course of 5 years (1998 – 2003) by the Asian Disaster Preparedness Center (ADPC), Bangkok in partnership with the Miami-Dade Fire and Rescue Department (MDFRD), Florida. India, Indonesia, Nepal, and the Philippines were the four initial beneficiary countries for this program, and the major focus of this stage was to establish partnerships with key stakeholders in program beneficiary countries and to lay the foundation work for the PEER Program. The key objectives for the first phase were: (1) Curriculum development and adaptation; (2) Instructor training; and (3) Institutionalization of end-user training programs.

PEER Stage 2 was implemented over 5 years (2003-2009) and was managed by the National Society for Earthquake Technology-Nepal (NSET), in partnership with International Resources Group (IRG), John Hopkins University – Center for International Emergency, Disaster and Refugee Studies (JHU/CIEDRS) and Safety Solutions Incorporated (SSI). PEER Stage 2 (2003-2009) began with the initial four member countries, namely, India, Indonesia, Nepal, and the Philippines with the addition of Bangladesh in 2003. After the Kashmir Earthquake of October 2005, Pakistan was also added into the program coverage in 2007, totaling six beneficiary countries at the end of PEER Stage 2. All the six countries involved possess high seismic risk and necessitate improved disaster response capacities, and the corresponding governments and civil societies have continuously expressed great enthusiasm for the program. The major focus of the second stage of PEER was to nationalize the program within the respective PEER countries. Nationalization emphasizes the adaptation of courses – Medical First Responder (MFR) and Collapsed Structure Search and Rescue (CSSR) – to national contexts and

translation to the national languages, integration of the courses into relevant institutions, and laying the groundwork for the creation of local and national networks to further the sustainability of the PEER Program.

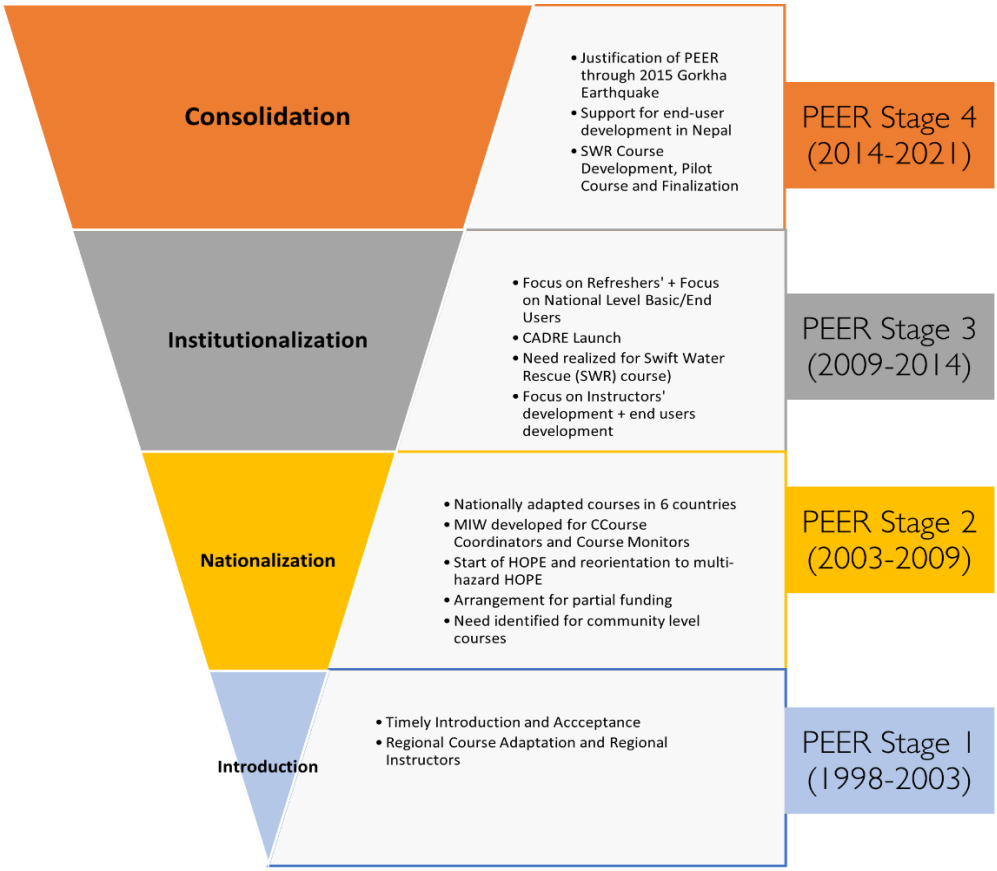



Figure 3: Progression of PEER Stages

**PEER Stage 3 (2009-2014)** was a continuation of the previous program implementation by ADPC and NSET. PEER Stage 3 was implemented with 3 major objectives: (1) Community Action for Disaster Response (CADRE); (2) Hospital Preparedness for Emergencies (HOPE); and (3) Medical First Responder (MFR) and Collapsed Structure Search and Rescue (CSSR) courses. The first two objectives were implemented by ADPC in ten countries, namely, Bangladesh, Cambodia, India, Indonesia, Lao PDR, Nepal, Pakistan, the Philippines, Thailand, and Vietnam. The third objective was implemented by NSET in six countries, namely, Bangladesh, India,

Indonesia, Nepal, Pakistan, and the Philippines. Furthermore, PEER Stage 3 aimed at further institutionalization of the capacities of countries to implement a sustainable disaster response training program and development of qualified instructors, course coordinators, and monitors who will facilitate the delivery of PEER courses and other related training programs in-country and in the region.

**PEER Stage 4 (2014-2021)** was implemented by NSET in four South Asian countries, namely, Bangladesh, India, Nepal, and Pakistan, with limited participation of four other countries, namely, Afghanistan, Bhutan, Maldives, and Sri Lanka. The main goal of PEER Stage 4 was reducing mass casualty events and increasing the survival rates of disaster victims in the program countries through the enhancement and institutionalization in disaster and emergency response capacity of South Asian countries by providing training on:

- Medical First Responder (MFR)
- Collapsed Structure Search and Rescue (CSSR)
- Community Action for Disaster Response (CADRE)
- Hospital Preparedness for Emergencies (HOPE)
- Swift Water Rescue (SWR)

Moreover, PEER also played a key role in the promotion of networking and collaboration among relevant individuals and institutions mainly in the South Asian region.

Participants rescuing a victim during their final practical exercise on SWR.

# 3 IMPLEMENTATION PEER COURSES

## 3.1 Overview

PEER has been involved in the development and implementation of a plethora of courses targeted towards enhancing the emergency response capacity of various countries, ranging from the Latin Americas and the Caribbean to South and Southeast Asia.

A brief overview of various courses under the PEER program has been highlighted in Figure 5. An introduction to each of the courses offered under the PEER program shall be discussed next, and the details of the contents and schedule of every course are provided in Annex A – Overview of courses for further reference.

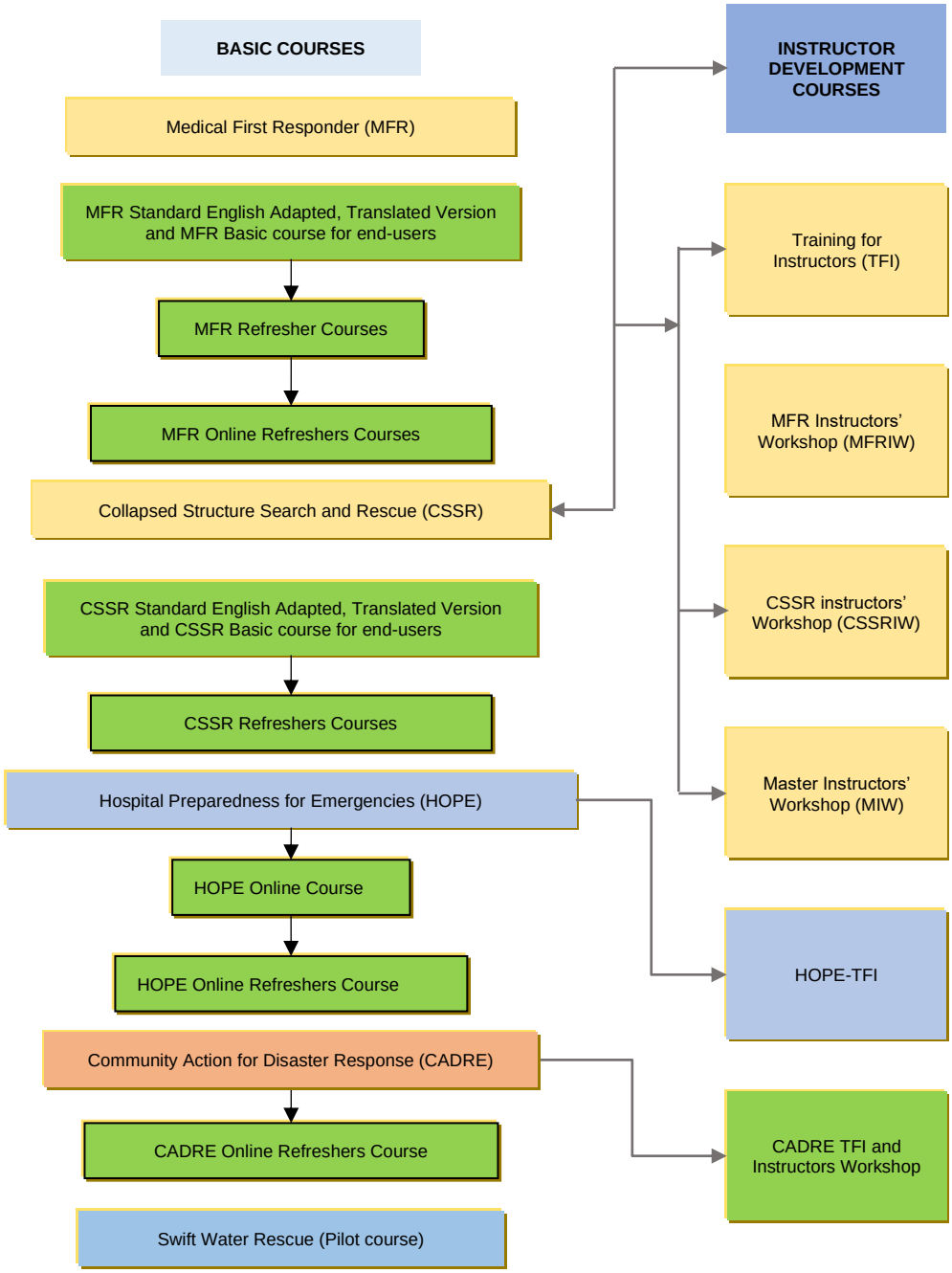



Figure 4: Figure Overview of PEER courses

### 3.1.1 Medical First Responder (MFR)

The MFR course aims to provide non-medical responders with first response tasks with the knowledge and skills necessary to assess, treat and transport sick or injured patients resulting from emergencies, accidents, or disasters.


### 3.1.2 Collapsed Structure Search and Rescue (CSSR)

The CSSR course aims to provide responders with collapsed structure search and rescue tasks with the knowledge and skills necessary to search for, stabilize and extricate victims trapped in collapsed structures using the safest and most appropriate procedures.

### 3.1.3 Hospital Preparedness for Emergencies (HOPE)

The HOPE course addresses the structural, non-structural, organizational, and medical concerns of health facilities to develop and implement well-designed response plans that increase their capacity to respond effectively to emergencies, including but not limited to mass casualty incidents, epidemics, accidents, and disaster scenarios.

### 3.1.4 Community Action for Disaster Response (CADRE)

The CADRE course aims to develop community-level disaster responders and future disaster volunteers, and thus help bridge the gap before the arrival on-site of professional emergency responders.


### 3.1.5 Swift Water Rescue (SWR)

The SWR course aims to provide responders the knowledge and skills necessary to search for, stabilize and extricate victims in a water-related incident in a swift water/white water scenario using the safest and most appropriate procedures.

### 3.1.6 Training for Instructors (TFI)

The TFI course aims to train future instructors to be able to perform tasks necessary to become effective instructors of not only PEER programs, but also become effective trainers for non-PEER affiliated courses.

### 3.1.7 Medical First Responder Instructors' Workshop (MFRIW)

The MFRIW course aims to provide future educators with the knowledge and practical skills necessary to become a Medical First Responder (MFR) Course instructor.

### 3.1.8 Collapsed Structure Search and Rescue Instructors' Workshop (CSSRIW)

The CSSRIW course aims to provide future educators with the knowledge and practical skills necessary to become a Collapsed Structure Search and Rescue (CSSR) Instructor.

### 3.1.9 HOPE-Training for Instructors (HOPE-TFI or H-TFI)

The H-TFI course aims to train future educators to perform the tasks necessary to become effective instructors of HOPE courses.

### 3.1.10 CADRE-Training for Instructors/Instructors' Workshop (CADRE-TFI/IW)

The CADRE-TFI/IW course aims to train future educators to perform the tasks necessary to become effective instructors of CADRE courses.

### 3.1.11 Master Instructors' Workshop (MIW)

The MIW course aims to develop potential Course Coordinators and Course Monitors under the PEER process. The workshop provides comprehensive instructor training information and skills practice for relatively inexperienced trainers; and to improve the skills of experienced trainers within the context of current PEER training programs, towards enhancing their skills as course coordinators and monitors.

## 3.2 Program Implementation

### 3.2.1 Project Implementation team

PEER program comprises a team that includes a Chief of Party (COP), a Deputy Chief of Party (DCOP), a Lead Trainer, Program Coordinator with associated office

staff, and In-Country Consultants (ICCs). A brief introduction of each member of the project team is described below.

## ▪ Chief of Party (COP)

The Chief of Party (COP) is the senior-most member of the PEER project management team and works closely with the Deputy Chief of Party (DCOP), Lead Trainer, Program Officer along with office staff and In-Country Consultants (ICCs). The COP shall discharge day-to-day program management and operations, personnel management and procurement, financial management, coordination, and reporting.

## ▪ Deputy Chief of Party (DCOP)

The Deputy Chief of Party (DCOP) assumes responsibility right beneath the COP and assumes most of the responsibilities for management and oversight of all the training programs. The responsibilities include personnel, procurement, financial management, coordination, and reporting.

He/She shall assist the COP in developing a program plan in the region.

## ▪ Lead Trainer

The Lead Trainer (LT) oversees all training activities undertaken to meet the program objectives. They are responsible for the establishment and development of the program, quality assurance of training, and support on course development.

He/She possesses considerable experience/expertise over major training modules of PEER.

## ▪ Program Coordinator

The Program Coordinator (PC) is responsible for overseeing all program activities undertaken to achieve the program objectives. He/She is responsible for the establishment, development, and delivery of the training and other related program events. Additional responsibilities include personnel, procurement, financial management on the field, coordination, and reporting.

## ▪ In-Country Consultant (ICC)

The In-Country Consultant (ICC) shall advocate and coordinate with nodal agencies and partner training institutions in their respective countries for the PEER program. As of Stage 4, there are ICCs for three countries: Bangladesh, Pakistan, and India. However, in earlier stages, there have been ICCs for Indonesia and the Philippines

as well. In the case of Nepal, most of the program activities are undertaken by the PEER team at NSET-Nepal, hence removing the need for an additional ICC.

- **Office Staff**

In addition to the above-mentioned roles within the project team, there is provision for Program Coordinator, Information Management Specialist (IMS), Training Course Materials Specialist (TCMS), Accounts Officer, Administrative and Logistic Support Staff, Monitoring & Evaluation Specialist, and relevant office labor and staff.

### 3.2.2 PEER Instructors' Team

The standard instruction team needed to conduct a PEER Course consists of a Course Coordinator, Instructors and Assistant Instructors, and a Course Monitor. The standard and minimum numbers of Instructors and Assistant Instructors needed to conduct a course are listed in the table above. The roles and responsibilities of the Instruction Team members are summarized below.

- **Course Coordinator**

The course Coordinator assumes responsibility for managing coordinating all the course activities, from the planning to the closing act, including course budget, dates, venue, facilities, equipment, materials, nominations, acceptance letters and pre-work, instructor assignments, testing and evaluation, security, administration and tabulation, and the after-course report. The Course Coordinator conducts the first lesson and can fill in as one of the instructors should that prove necessary at the last minute.

- **Secretary**

Secretary contributes in preparing invitations, acceptance letters, works with the logistics coordinator in conducting logistical arrangements, prepares photocopies, certificates, course directory, and other administrative assistance. The secretary need not be a PEER course graduate but must have proficiency working with computers, including Word, Excel, and PowerPoint. The secretary is provided by the host country/institution.

- **Instructors**

Instructors prepare and present course lessons, are aided by the Assistant Instructor, prepare the classroom and audio-visual equipment for each lesson, conduct the exercises, and supervise the practical exercises and group presentations, evaluate presentations and any final evaluation or exercises. Instructors are given additional

roles and responsibilities in the course, as logistics coordinator, classroom manager, etc. to assist the course coordinator in managing the course. Instructors must have completed the respective course, Training for Instructors and depending on the course, the Instructor Workshop as well. Instructors should ideally first serve as Assistant Instructors.

- **Assistant Instructors**

Assistant Instructors work with the instructors, assist in the lesson preparation delivery, and accomplish other tasks assigned by the Course Coordinator in conducting the course. Assistant instructors are also given a minimum of one lesson to prepare themselves to take up more responsibilities in subsequent courses as full instructors.

- **Course Monitor**

One certified Course Monitor is required to observe, monitor, and evaluate the course. The Monitor should be an experienced course Instructor and Course Coordinator, and ideally a PEER-certified Master Instructor.

- **Observers**

Observers may be present (2 in number) provided sufficient space. They are provided the course materials but sit at a separate table and do not interrupt or directly participate in training activities. They are usually representatives of nodal agencies, selected or invited to gain first-hand knowledge of the course to understand how the training could improve emergency response capacities in their country and how and where the courses might best be institutionalized in existing organizations.

### 3.2.3 Implementation Structure

PEER is supported by USAID/BHA and works under the guidance of focal agencies in each country partnering with identified institutions in respective countries. The NSET PEER implementation organogram for PEER programs is depicted in **Figure 4**.

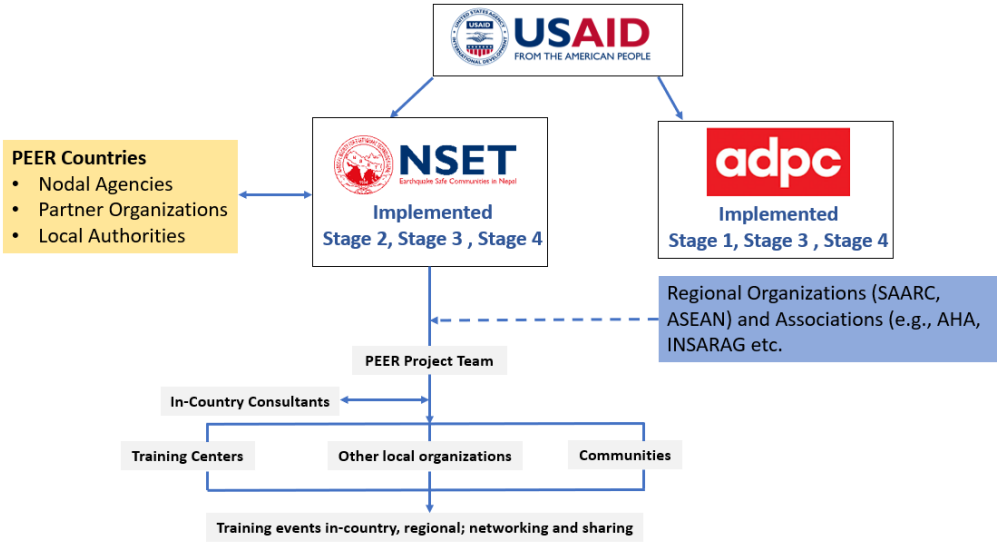



Figure 5: Implementation Organogram

### 3.2.4 Implementation Process

- **Identification of partner agencies for core courses**

NSET/ADPC obtains the strategic direction and recommendation from the nodal agency when engaging a new partner training institute into PEER. Further, NSET, the nodal agency, and the potential partner training institute or partner organizations are guided by the program goals, objectives, and specific program requirements. NSET and potential training institutes undergo a series of meetings and assessment visits to ensure compliance to program requirements and commitment to program implementation and towards institutionalization of MFR and CSSR courses. NSET utilizes the MFR and CSSR checklist for the selection of training facilities as a basic reference in the assessment. NSET provides recommendations based on PEER requirements.

A detailed list of all the nodal agencies, and partner training institutions for various stages of the PEER program are detailed properly in **Annex B – List of nodal agencies and PEER partner institutions**.

## ▪ Meetings and Workshops

A series of meetings and workshops are conducted before and after conducting various PEER courses as a means for proper planning, organization, and review of the programs. Some of the major meetings/workshops are discussed below.

### Strategic Planning Workshop (SPW)

Strategic Planning Workshops were held to develop a consensus on issues, gaps, approaches, and methodologies. Moreover, such workshops also help in identifying resources, capabilities, and needs for improving the courses. The major topics for discussion in Strategic Planning Workshops are potentials for regional networking and possible mechanisms; development, maintenance of PEER Database systems; and the possibility of expanding the database to include national capabilities, mode of operation, database hosting, etc. SPWs provided opportunities for all program countries to meet, share and establish a mutual learning process. SPW involves the participation of professionals from nodal and partner training institutions and the team of instructors from each program country including the potential new countries.

### Country Planning Meetings

Country Planning Meetings and Workshops were arranged at the outset of PEER in each stage and each PEER affiliated country for discussing the country-specific needs, major strategies for the development of required instructors and end-users for different emergency response courses, and plans, programs for achieving the strategies. The Country Planning Workshops are attended by representatives of National Disaster Management Organizations (NDMOs) and partnering training institutions, a team of instructors plus affiliated academia and private sector institutions and foundations. These meetings provide a consensus on priorities and basic contents of the country plan for different PEER Stages.

### Sharing and Lessons Learned Workshop

Lessons Learned Workshop was organized at the end of the program in September of 2021 to capture key lessons and recommendations for the future of PEER.

### Periodic Briefings

Periodic progress briefing and review meetings were organized among the program partners in the countries to review the progress status of PEER programs and

institutionalization in the country and discuss critical issues that might be delaying the progress.

### Project Team Meetings

As the name implies, project team meetings are meetings conducted among the members of the project team comprising the COP, DCOP, Lead Trainer, Program Coordinator, Office staff, and other associated staff to discuss the current progress of program schedule, completion of program objectives, management of program events, and discussion on any matter that is pertinent to maintaining the continuity of the PEER program within schedule.

A list of major meetings and workshops conducted during the 4 stages of PEER is shown in Annex D – List of meetings and workshops.

## ▪ Activity Design and Implementation

After the proper planning of PEER programs under the PEER Project Team, the project team identifies and instructs the PEER Instructors' team to properly see through the completion of any PEER course. The general PEER training methodology adopted in all PEER courses is discussed here.

### PEER Training methodology

PEER training methodologies formed a part of the bigger process in preparing individuals and organizations to perform their roles in emergency preparedness and response. NSET ensures in every PEER training a supportive adult learning environment that will promote maximum learning experience for the trainees. PEER involves the nodal agency and partner training institutes in the program implementation that will encourage program ownership and institutionalization. From PEER Stage 2 onwards, NSET has been guided by the following program principles, methodology, and training guidelines for the implementation of MFR and CSSR courses.

### Guiding Principles of PEER Training

- Local involvement of countries/agencies in course identification, development, and adaptation.
- Courses are tailored to the local context and in the local language.
- Designed to promote a multiplier effect (cascade approach).
- Development of a cadre of instructors [participants (end-users), presenters, instructors/facilitators] to whom the courses can be "handed-off".

- Institutionalization of the courses at the national and local level into agencies that can maintain the courses and continue to offer them.
- Performance-oriented, objective-based, interactive, evaluated, and adapted.

The following describes the training methodology used in PEER while conducting training courses:

### Performance-Oriented

If the problem to be solved is performance, then the training must focus on the performance to be demonstrated. Performance objectives, the expected behavior at the end of the training, are written for each course, based on the job tasks for which the training is being conducted. These performance objectives are determined before the development of the training is begun.

### Objective-Based

All units and lessons in the PEER training courses are based on instructional objectives. These objectives describe what a participant will be able to do at the end of training and must be measurable, observable, and attainable. Both the participant and instructor are then pointed in the right direction.

### Interactive

Adults do not learn in the same way children do and they should not be taught in the same way that children are taught. Participants in PEER courses and workshops bring a wealth of knowledge and experience to the table. This expertise and experience might be transferred more easily via interactive training. Facilitators/ Instructors are trained to "guide people to their own discoveries".

### Evaluated

Since performance on the job is the reason for training, then the participant's performance at the end of the training must be evaluated to see if they have achieved the desired performance level. MFR and CSSR courses have both written and practical skills evaluations to gauge the participant's performance.

### Adapted

For the courses to be widely and regularly used, they need to be tailored to the national context and arrangements. Often, they need to be translated. Adaptation workshops bring together those who are familiar with the course to identify the necessary modifications required for the courses to be suitable for use in the

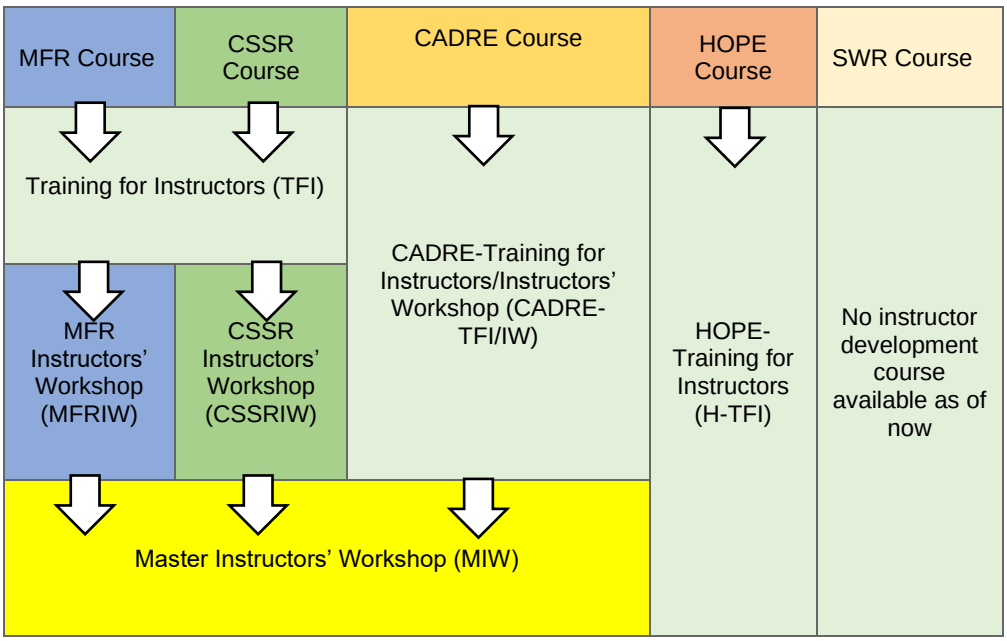
respective PEER countries. Once courses are adapted, they are transferred to the countries as PDF documents, for further use and reproduction.

## 3.3 Instructors' Development Process

PEER implementation pursues developing a training system that continuously provides efficient disaster response with qualified personnel for search and rescue and medical first response, and with medical facilities prepared to receive disaster victims.

PEER has established a laddered process of instructors' development to produce a cadre of qualified instructors in each of the beneficiary countries. Built upon the experiences of PEER Stages 1,2, 3, and 4, NSET implements a series of instructors' courses for developing MFR, CSSR, HOPE, and CADRE instructors. Table 1 provides a brief description of instructor development courses of the above PEER core training.

Table 1: PEER Instructor Development Streams




Potential instructor candidates are selected and nominated to complete the core courses of MFR, CSSR, HOPE, and CADRE as a minimum requirement, before proceeding with instructors' courses. After completion of the core courses, then the

most potential to become future instructors are nominated to the next level instructors' development stream, such as TFI, MFRIW, CSSRIW, H-TFI, CADRE-TFI/IW, MIW, as applicable to the specific core course. There are different streams of courses that need to be completed in a specific order to become a full-fledged instructor in any specific PEER course. These streams of courses are properly detailed in **Annex E – Course streams for instructors' development**.

### 3.3.1 Personnel and Participation Requirements for PEER Training Courses

The following are the guidelines for the selection and composition of PEER training course instruction teams, observers, and participants. They are based on past PEER programming norms and procedures established by BHA.

The goal of PEER training is both to develop and strengthen PEER training systems across program countries as well as to produce as many properly trained PEER instructors, first responders and rescuers, and hospital preparedness experts as possible. Accordingly, PEER management will allow rare exceptions to the guidelines below on a case-by-case basis, informing USAID when it does and including an explanatory justification why the exception was appropriate.

Table 2: Number of personnel for various PEER courses

| Course | CC[1] | Monitor | Secretary | Instructors + Assistant Instructors | Observer | Participants | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Standard | | Min | Standard | Max |
| 1. MFR | 1 | 1 | 1 | 11 (7 + 4) | 0-2 | 18 | 24 | 24 |
| 2. CSSR | 1 | 1 | 1 | 11 (7 + 4) | 0-2 | 18 | 24 | 24 |
| 3. TFI | 1 | 1 | 1 | 8 (5 + 3) | 0-2 | 18 | 24 | 28 |
| 4. MFRIW | 1 | 1 | 1 | 8 (5 + 3) | 0-2 | 18 | 24 | 24 |
| 5. CSSRIW | 1 | 1 | 1 | 8 (5 + 3) | 0-2 | 18 | 24 | 24 |
| 6. MIW | 1 | 1 | 1 | 4 (2 + 2) | 0-2 | 18 | 24 | 24 |
| 7. MFR RC | 1 | 1 | 1 | 9 (7 + 2) | 0-2 | 18 | 24 | 24 |
| 8. CSSR RC | 1 | 1 | 1 | 9 (7 + 2) | 0-2 | 18 | 24 | 24 |
| 9. HOPE | 1 | 1 | 1 | 7 (5 + 2) | 0-2 | 18 | 24 | 28 |

1. CC = Course Coordinator

(Note: Instructors' compositions in MFR and CSSR streams are subject to further review.)

### 3.3.2 Training Facility Requirement for Conducting PEER Courses

It is important to select facilities in a quiet area, where participants can concentrate. As much as possible, the site should be far from central locations such as main cities, large malls, etc. However, it should not be so remote that it makes it difficult to obtain necessary supplies or emergency medical attention.

The course coordinator and logistics coordinator together should inspect the facilities. Consider access to the facility and cleanliness. The CSSR Course is designed to be delivered either of two ways: on-site housing, in which the participants are housed and sleep at the course location; and offsite housing, where the participants are lodged elsewhere and commute daily to the course location. For on-site courses, the quality of the lodging facilities must be verified to assure the participant will have enough room and ample light to study. In both cases, the facility should offer enough rooms and space for practical sessions, exercises, and presentations. Security, illumination, ventilation, acoustics, furniture, and the location of electrical outlets must be considered. The electrical system at the location must be able to handle equipment like a photocopier without overloading the electrical circuits. Noise that can become distracting, such as from airports, trains, factories, schools, stadiums are also a consideration. Distractions must be reduced or eliminated to the extent possible.

Some specific basic needs are:

- One large classroom suitable for 30 participants with tables assembled in a U-shape to accommodate 24 participants. Minimum classroom dimensions must be 9 meters x 15 meters.
- One table for the instructor and projector at the head of the classroom.
- Tables and six chairs for assistants, other instructors, monitors, and visiting dignitaries at the back of the classroom.
- Three break out rooms with a minimum dimension of 6 meters x 6 meters for practical exercises.
- One room large enough for five instructors to prepare their lessons and audio/visual aids. This room may also be used as the instructors' room for meetings.
- One room for the secretariat and for storage of some materials and equipment.
- Space outside the classroom for outdoor activities.

- Restrooms for men and women close to the classroom.

Additional requirements for CSSR and CSSRIW:

- A level practice field 30 meters by 30 meters in size where the eight props will be built, and four concrete slabs will be located.
- A building close to the classroom for conducting search drills and shoring practical exercises.
- Secured storage facility, at least 30 square meters in size, close to the practice field for storage of all materials, equipment, tools, and accessories.

### 3.3.3 Training Material Requirement for Conducting PEER Courses

Standard training materials are provided for all PEER courses. There are two types of materials: printed and non-printed materials. The standard materials for each course must be utilized for the course to be certified.

Printed materials are as follows:

- Participant's Workbook: This serves as a guide for the participants to follow the lesson.
- Instructor's Guide: This contains the lesson plans for each of the lessons.
- Instructor's Workbook: This contains the body of the participant's workbook with all answers to fill-ins and lesson post-tests.
- Coordinator's Guide: The course coordinator and assistant coordinator use this material as a guide for managing the course.
- Exercise Guide: This is the guide for the instructors in conducting practical exercises for CSSR.
- Pre-work: The level of the knowledge and skills of the participants relative to the course. This also gives participants adequate information about the course.
- Reference Material: Each of the courses has its respective reference material where the lessons have been derived.

Non-printed materials are the training equipment and supplies. A separate list is provided for this.

## 3.4 Scope and Evolution of PEER Courses

The concept of PEER in the region was first introduced as a means for enhancing emergency response capacity in case of major earthquakes. However, with time, the focus of PEER has diversified to consider multiple hazards including but not limited to earthquakes. New courses have been introduced and the existing courses have evolved and adjusted to address emergency response to different sorts of disasters in the PEER region. There have been significant and continuous amendments in the principal courses of PEER to adapt to the changing time and context. The PEER courses have broadened their scope to accommodate emergency response capacity building at the community level, in addition to national-level capacity building. The evolving scope of PEER courses has been explained in detail in this section.

The detailed timeline for the introduction and evolution of several PEER courses and major PEER keystone events is highlighted in **Figure 5**.


Figure 6: PEER Evolution

### 3.4.1 Development of HOPE

The development of the Hospital Prepared for Emergencies (HOPE) course was initiated in Stage 1 and was completed in Stage 2, with assistance from NSET, John Hopkins University – Center for International Emergency, Disaster and Refugee Studies (JHU-CIEDRS), and a team of leading experts from the Asia-Pacific region. The beauty of the HOPE course was the involvement of Asian experts from the very beginning which made it very suitable for the Asian setting and context and did not require adaptation like the other PEER courses.

In the process of developing and finalizing the HOPE course, NSET, JHU-CIEDRS, and the entire course development team emphasized the optimal balance among the three components of the training curriculum, mainly the theoretical, case studies, and exercises. HOPE course employs all these three components in a very balanced manner to deliver the course effectively to ensure maximum learning. HOPE is a four-day course that aims to address the structural, non-structural, organizational, and medical concerns of health facilities to develop well-designed plans for these facilities to respond more effectively to emergencies. Like all PEER courses, the methodology includes highly interactive lectures and discussions, case studies, and exercises. HOPE also has a course coordinator and course monitor to achieve the course objectives and standards of PEER. The first HOPE Course targeted medical experts in the field of emergency medicine and disaster management, serving as faculty or lecturers at training institutions where future HOPE courses could be conducted. Accordingly, the first HOPE course in each country was intended to train future HOPE instructors. Subsequent HOPE courses opened out to members of hospitals' disaster planning committees, including hospital administrators, hospital engineers, emergency room physicians, nurses, and hospital planning personnel. NSET encouraged, as well as supervised the constant improvement of PEER courses with every course.

During Program Year 5 (2007) of Stage 2, NSET initiated and led the reorientation of the course to address multi-hazard situations, developing an upgraded HOPE curriculum. This undertaking was sanctioned by OFDA. Series of activities for the HOPE course multi-hazard curriculum development process was undertaken, engaging course developers of the first HOPE course as well as experts from PEER countries, involving them during the consultation process, brainstorming, course finalization, piloting, and final review of the curriculum. The reoriented HOPE course was then re-introduced in PEER countries after the pilot course in Nepal in July 2008.

### 3.4.2 Introduction of CADRE

Community Action for Disaster Response (CADRE) was introduced under the PEER program in Stage 3 to develop community-level disaster responders by training participants thereby building up disaster awareness and response capacity within communities at risk in Asia. CADRE has been working to empower local communities while giving them a better chance to respond to disasters effectively, as well as integrating the community into the national emergency preparedness network. CADRE skills can help reduce mortality rates significantly and increase disaster resilience, as the local community is almost always the first responder in case of disasters.

### 3.4.3 Realization of SWR

PEER Stage 4 started exploring the possibility of designing and adapting a swift water rescue course in certain countries of South Asia. Considering the unique physiographic situation in Nepal, where the worst form of swift water hazard can be felt in natural conditions such as rapids, whirlpools, etc., Nepal was selected as the location for the development of the Swift Water Rescue (SWR) course. Additionally, the presence of other professional organizations and individuals in Nepal who have been previously involved in different forms of swift water response actions for recreational or adventure purposes could help make hosting, handling, and promoting swift water rescue courses more realistic and cost-efficient.

### 3.4.4 Master Instructors Workshop (MIW) Development

The Course Coordinator is one of the key players to lead and manage the conduct of the course. The role of the Course Coordinator is challenging and vital for the success of the activity as he guides the instruction team to achieve the objectives in course delivery and shaping the quality of graduates which ultimately directs to saving lives. The Course Monitor works closely with the Course Coordinator and the instructors in maintaining course standards. He/she also examines preparatory activities done for the specific course. During the initial phase of the program, SSI expert faculty monitored the courses, especially in IWs. To sustain the program in the region with all established program standards, there was a need to advance senior and most experienced instructors as Course Coordinator and Monitor, hence the Master Instructors Workshop was developed and implemented in 2005. In the earlier part of Phase 2, a Facilitators' Workshop (FW) was designed especially for India. India expressed its interest to institutionalize MFR and CSSR curricula in the training of its disaster response teams. NSET and SSI designed and organized the

FW in March 2004 as a special course to validate the capability of National Industrial Security Academy (NISA) and Indo-Tibetan Border Police (ITBP) instructors in teaching MFR and CSSR courses. FW was considered then as an experimental course in developing 'master instructors'. In 2005, PEER countries recommended certifying qualified Course Coordinators and Course Monitors to run and maintain course standards. NSET organized a regional Master Instructors Workshop (MIW) in the Philippines in February 2006, incorporating the PEER concept of course coordination and monitoring. The team of experienced faculty from SSI facilitated the workshop. The first regional MIW was successful to produce qualified course coordinators and monitors. To support the sustainability of the program, NSET/PEER organized MIWs at the sub-regional level, one in Bacolod City, the Philippines in July 2007, with participants from the Philippines and Indonesia; and another one in Nepal in September 2007, with participants from Nepal, India, and Bangladesh. After completion of two sub-regional MIWs, PEER partnering countries had their national groups of course coordinators and monitors to handle PEER courses. Aside from managing PEER courses, master instructors are also engaged in adaptation and translation processes, course development workshops, and may provide expert inputs for the conceptualization of national emergency response and training strategies.

NSET/PEER initially proposed to conduct MFR and CSSR courses in the respective countries and conduct IWs at the regional level to develop instructors for MFR and CSSR. After conducting regional IWs in Hyderabad, India in December 2003, NSET/PEER realized that the process is ineffective in developing instructors and may also affect completing the adaptation process of the course materials in member countries. Therefore, NSET/PEER decided to conduct IWs in individual countries. This approach was successful in developing a national cadre of instructors. The lesson learned from IWs in Hyderabad, India was a catalyst in developing a pool of national instructors. NSET believes that these IWs help address the normal process of attrition, through the continuous development of a pool of instructors.

### 3.4.5 MFR and CSSR Refresher Course Development

MFR and CSSR Refresher Course development are significant achievements to further assist PEER countries in having highly skilled responders, promoting continuing education through refresher courses on MFR and CSSR. The concept of re-certification of PEER graduates was discussed during the Second Regional Planning Meeting in Manila, the Philippines in 2005. In 2007, during the Third Regional Planning in Jakarta, Indonesia, the draft refresher course framework was presented to the group of master instructors, who then recommended a separate

workshop for the design and development of the refresher course curriculum. Further consultations and studies were made and concluded that two-year inactivity with the PEER system becomes the qualifying criterion for recertifying PEER graduates. Selected master instructors from the region designed and developed the course in September 2007, in Kathmandu, Nepal. A total of 24 participants attended both courses, from Bangladesh, India, Indonesia, and the Philippines. Pakistan was not yet included as its graduates are still within the validity period of PEER certification. These refresher courses aim to upgrade the knowledge and skills of inactive PEER graduates on key concepts like BLS and CPR for MFR; and INSARAG Guidelines, for CSSR.

### 3.4.6 MFRIW and CSSRIW Refresher Course Development

MFR and CSSR are skill-based courses for responding to emergencies to search for, assess, provide pre-hospital care, while also stabilizing, extricating, and/or transporting victims because of an emergency or disaster. Concepts and procedures are frequently updated by international experts, and it was realized that skills learned without practice or application may deteriorate and are likely to vanish. Instructors need to be constantly updated in these skills to deliver the courses within the acceptable standards of quality since PEER courses cover life-saving skills as well. Therefore, PEER countries recommended coming up with a refresher course for MFRIW and CSSRIW as a form of recertifying the 'inactive' instructors after five years of the last period of instructing the course. These refresher courses are offshoots of the earlier PEER MFR and CSSR refreshers developed in PEER Stage 2. While NSET and senior PEER instructors in the region were in the process of developing the MFRIW-CSSRIW refreshers curriculum during PEER Stage 3; and NSET was while crafting the annual work plans per country, PEER countries expressed prioritization of more regular MFR and CSSR courses to meet the need for a fresher and younger breed of PEER graduates. Therefore, the course development for MFRIW and CSSRIW refreshers curriculum was put on hold and the original plan for conducting test courses per country was replaced with regular MFR-CSSR and instructors' development courses.

### 3.4.7 Course Development on MFR and CSSR Courses for End-users

MFR and CSSR basic courses, a curriculum for the training of end-users (responders) was developed at the end the Stage 3 by NSET with the approval of USAID/BHA. With the involvement of some of the senior and experienced MFR and CSSR instructors in Nepal, NSET developed MFR basic and CSSR basic courses utilizing

the Nepali language version of the MFR and CSSR curriculum. NSET capitalized on the experience from implementing the regular MFR and CSSR courses in designing the end-user training program and explored ways to achieve a quality and cost-efficient responders' training program model. The newly designed MFR-CSSR end-user training is shorter than the regular PEER MFR-CSSR program for instructors' development, which may also mean lesser costs to be incurred but retaining most of the necessary emergency response skills.

### 3.4.8 Online Course Development for MFR, HOPE, and CADRE Refresher Courses

Particularly during the CoVID-19 pandemic, it was realized that conducting courses with the physical presence of participants and instructors might not always be possible. This became a major concern as several planned programs needed to be postponed or canceled because of the pandemic. Change in the modularity of the courses to an online form was necessitated, specifically for courses that do not demand the use of heavy-duty equipment, or with little onsite training involved. Online refresher courses for MFR, HOPE, and CADRE were developed in 2020 which helped the corresponding responders stay up-to-date, and up to the task in need. Considering similar future circumstances might arise, further exploration of online modules for the current version of PEER courses is also being considered.

A total of four MFR, six HOPE, and five CADRE Refresher Courses were conducted by NSET throughout 2020 and 2021 under PEER Stage 4.

## 3.5 Course Review Process

As a means for evaluation of the courses themselves, in addition to the evaluation of the participants and instructors in respective courses, certain course review standards were set in place. These include various unit tests, pre-tests, and post-tests, individual and group theoretical and practical exercises, daily course evaluation, and so on.

A survey is conducted at the beginning of each course to gauge the expectations of the participants from the courses; the expectation survey helps the instructors to effectively address the participants' concerns. Moreover, the participants can later evaluate the course themselves based on their prior expectations.

Pre-tests are a means to gauge the knowledge of the participant concerning the respective course before participation and are conducted at the beginning of every course.

Post-tests are similar to the pre-tests and are conducted at the end of every course to evaluate the progress of the participants owing to participation in the course. The progress is evaluated against the scores obtained by participants earlier in pre-tests.

Unit Tests are conducted during the course as a means of evaluation of the participants based on the contents of the courses. Factors such as attention, motivation, feedback, and level reached by participants in the courses are used as a basis for the evaluation of participants. Depending on the courses, some of the exercises are performed individually, while there are multiple group exercises as well. The exercises assess both the knowledge of the participants and their practical skills in the form of practical exercises.

Instructors undergo self-evaluation, in addition to being evaluated by the participants based on their method, technique, and delivery of the course. The comments from the assistant instructors, other instructors, course coordinator, and the course monitor involved in the course are also collected for evaluation. Similarly, daily evaluation of the course is also performed where the problems encountered, positive aspects of the course, and aspects needing improvement – including but not limited to preparation, implementation, logistics, and overall management of the course – are also reviewed.

At the end of the course, a post-course review is conducted where the course coordinator and the instructors evaluate the instructors' performance, the involvement, and performance of the participants and recommend candidates for further instructor courses where applicable. Moreover, they also evaluate the appropriateness of the facilities, furniture, services and equipment, and props at the course venue for future reference.

The certificates are awarded to the participants based on the final scores achieved by them. Depending upon the courses, if the participants can equal or exceed the passing score for the course, they are awarded the Certificate of Completion and they are deemed as graduates of the course. Additionally, the Instructors' Group itself has the highest authority in determining the qualification of the participant, and thus in some exceptional cases, depending upon the decision of the Instructors' Group, the participant might fail even if they achieve the passing scores. In certain circumstances where the participants are unable to complete the attendance required for the course, or if the participants are not able to reach the passing score, then they shall not be awarded the Certificate of Completion, rather a Certificate of Attendance is provided to such participants. Furthermore, any breach in safety rules or indecorous disposition during the course might also be deemed as a means for disqualification for graduation by the instructor teams.

The instructors, course coordinator, and the course monitor are provided with a Certificate of Appreciation for their invaluable contribution in helping conclude the course.

The templates for the Certificate of Appreciation, Certificate of Attendance, and Certificate of Completion are illustrated in Annex C – PEER certificates.

### 3.5.1 Program Costs and Financial Management

Starting in Stage 2, NSET started exploring ways of reducing the program costs. PEER Partial Funding Assistance Program (PFAP) was conceptualized and introduced in PEER Stage 2 to encourage program ownership by countries and promote program sustainability through sharing of program costs by NSET-PEER and the PEER country.

The average cost of developing an individual to become an MFR and CSSR master instructor, i.e., completing the full series of instructors' courses from MFR to CSSR course until Master Instructors' Workshop (MIW) was found to be significantly lower under the PFAP program. Additionally, the approximate training cost under PEER PFAP support can be further reduced if countries' willingness and commitment to take in more of the expenses increases.

#### ▪ Full funding and PFAP – Budgetary changes

In support of PEER's overall objective to enhance the capacity of PEER partner countries to organize and deliver their own PEER training courses, and to assist the partner countries with their efforts to nationalize the PEER program, the PEER Partial Funding Assistance Program was conceptualized and launched in Stage 2.

Through this initiative, NSET-PEER started the provision of limited financial assistance to the partner agencies in support of nationalizing the PEER program. This assistance might be limited to costs associated with:

- Reproduction/printing/binding of training and reference materials
- Cost of CSSR simulation props repair
- Course supplies
- Lunch and two tea breaks per day for Instructors and Participants
- Associated costs for PEER Regional Monitor
- Per diem for national instructors
- Cost of expendable and non-expendable training equipment and accessories

Costs not covered within the partial funding program:

- Allowances for participants
- Remuneration for national instructors
- Costs associated with the rental of hotels or other venues for courses
- Costs associated with the rental of training equipment and vehicles (local transportation)
- Entertainment costs, i.e., receptions, opening/closing social events
- Computer or computer equipment
- Associated costs for support staff
- Self-organization of PEER Program in the presence of PEER monitor

### ▪ Development of regional and national monitors

The development of regional or national monitors for course implementation supports sustainability and continuation of courses locally. With the present number of graduates in each of the PEER-affiliated countries, most PEER-affiliated countries have developed enough national instructors, course coordinators, and monitors, especially in the later PEER stages. However, a healthy balance of instructors and participants in the PEER programs demands continuous development of course monitors in the future as well.

### ▪ Sharing of training resources

Through the sharing of reusable training equipment and resources at disposal, the training agencies can cut down the expenses for implementing PEER programs over time. For example, the use of lodging and training halls available at the training agencies can help cut down additional costs on hotel & lodging and reservation of halls. The reuse and sharing of hardware and equipment that are necessary to implement the courses can help reduce the financial burden, as only expendable resources need to be procured.

### ▪ Involvement of local expertise

The development of national-level instructors and course monitors has created a significant chance of using local instructors and monitors rather than engaging them from other PEER countries. This has also helped cut down the costs for these PEER courses to a substantial amount, where utilizing the local instructors and monitors could save a major portion logistically. Similarly, in cases of courses such as Swift

Water Rescue, local expertise that is more acquainted with the river terrain and has a good amount of experience in such swift waters can be hired.

### 3.5.2 Curriculum Review and Improvement

Curriculum Revision and potential improvement have been a dynamic process in the PEER program. Depending upon the time and context, there have been notable changes and revisions in the contents of the PEER courses. However, the core value of the course/lesson has not deviated. A basic example would be a change in CSSR guidelines and equipment based on the changes made in the INSARAG Guidelines, or a change in MFR guidelines based on changes brought upon in AHA guidelines.

Similarly, based on the requirement of new forms of disaster response, courses such as Swift Water Rescue (SWR) were also developed in Stage 4.

## 3.6 PEER Information Management

### 3.6.1 Development and Maintenance of PEER Database

The PEER Database System was first designed and developed by NSET during PEER Stage 2, and later during Stage 3, when NSET and Asian Disaster Preparedness Center (ADPC) implemented specific PEER components, an upgraded version of the system was developed. The PEER online database was further improved covering all PEER program components implemented by NSET and ADPC so that every PEER country can easily access the system through the internet, with specified user credentials. The updated web-based PEER Database System was developed jointly by NSET and ADPC, Bangkok. At present, the PEER Database is maintained and hosted by NSET.

- **Purpose of PEER Database**

The PEER database is a helpful tool for tracking active/inactive instructors, planning qualified instructors in training events, at present. A long-term vision for the PEER database includes sharing of information for the deployment of qualified/trained/active responders during emergencies and eventually handing over the database to PEER countries which were completed in September of 2021 at the Lessons Learned Workshop.

The main purpose of the PEER Database System is to keep and maintain key information on the program activities accomplished under PEER. These activities may be regional or in-country, and the important information includes PEER nodal

agencies, partner training institutions, all participants in program events, including Instructors and Graduates under various stages of the PEER program. This information serves as a digital directory for future reference in time of need. NSET's long term vision for the PEER database is to aid the governments and institutions in planning and decision-making such as in, but not limited to:

- Planning for instructor development training from the pool of qualified graduates.
- Planning for qualified instructors in training.
- Organizing refresher courses for inactive instructors and graduates; and
- Mobilization of experts, responders and volunteers in emergency response operations, simulation exercises, forums and other relevant activities in emergency preparedness and response.

The major target audience for the utilization of PEER Database are the PEER Countries Nodal Agencies, Partner/ Institutional Agencies (Emergency and disaster first response groups, i.e., Fire Departments, Red Cross/Red Crescent Societies, Police Departments, and Rescue Groups associated with government emergency response systems), Graduates/Instructors.

- **Facts and figures, Presentations and Publications**

PEER maintains most of the facts and figures, presentations and publications in the PEER Database and PEER Archive, for access to all relevant stakeholders.

### 3.6.2 Media Outreach/Web-based platforms

PEER maintains a webpage where information on the current PEER status, information on PEER courses, past training courses conducted, past publications, photographs, PEER Impact, and other additional information related to PEER can be accessed.

Similarly, the ease of access to social networking platforms has encouraged more active connections among PEER graduates. At the end of PEER Stage 4, different platforms have been established on social media:

### 3.6.3 Program Reports

The reporting of the progress of the PEER program to the donor agency was performed at regular intervals, in the form of Program Reports. As per the requirement of the program, three variations of timely reports were prepared.

Quarterly reports were submitted to USAID/BHA 4 times in a program year. Additionally, annual reports were prepared at the end of the program year. Finally, a program completion report was prepared at the end of every stage of the PEER program.

## 3.7 Program Monitoring and evaluation

The evaluation of the PEER program has been performed to some extent in every phase of PEER. However, a more systematic and robust system for program monitoring and evaluation has been adopted in the later stages of the program.

Monitoring and Evaluation (M&E) of the PEER program has been performed at various levels/tiers – from the effectiveness of the lessons within the PEER courses to the impact of the PEER program at subnational, national, and regional levels.

Similarly, periodic evaluation of the PEER program has been performed to evaluate the progression of corresponding objectives of the program, a final evaluation at the end of the program stage was also performed.

Evaluation can be internal, wherein the impact of PEER through the perspective of the implementing agency is studied, or can be external and unbiased, where the impact of PEER on the community and the nation can be studied independently. Internal Evaluation can help the implementing agencies realize their limitations and external evaluation helps provide a fresher, impartial, and different perspective to the existing problems and respective solutions evaluation of the program activities is about realizing past shortcomings and improving upon them in the future.

These evaluation reports are huge assets to the PEER program as they highlight the past obstacles and problems and provide room for future revisions and improvements if necessary. A brief discussion of the M&E methodologies adopted in the four stages of PEER is discussed in this section.

### 3.7.1 PEER Program Stage 1

ADPC used USAID's results-based framework to develop several indicators. PEER management monitored and tested all curricula adaptations. PEER staff monitored and developed reports on each of the training courses. ADPC has developed a basic database to monitor the number of training courses conducted, the number of trainers, the number of participants that took the courses, and the number that graduated.

### 3.7.2 PEER Program Stage 2

NSET's strategy in monitoring and evaluating program implementation was through regular interaction with PEER In-Country Consultants, course reports from course coordinators and monitors, participants' course evaluations, interaction, and feedback from partnering countries, institutions, and instructors during regional events such as Regional Planning Meetings (RPMs), and national events like Country Planning Meetings (CPMs). All relevant information gained through interaction with our implementing partners serves as baseline information for monitoring and evaluation purposes. Monitoring of the cost-efficiency of the PEER courses was built-in into the program implementation so that every training event produced a maximum number of trainees- 24 for MFR and CSSR series of courses and 28 for TFI and HOPE courses. Any course event with less than 18 candidates was reset to another date until the required number of participants is reached. Based on experience, these numbers provide optimum use of resources and ideal group size for collecting, analyzing and evaluation of results with reference to the course's pass/fail level. A formal monitoring and evaluation of PEER staff was done in 2007. In September 2007, a Program Performance Report was submitted to USAID/OFDA. The report presented the partnering countries' perception of the PEER program, and how PEER training and skills are being used. Based on the indicators endorsed to and approved by OFDA, the results reflect satisfactory performance from partnering countries, however, some limitations and challenges were noted, such as:

- The report was a collection of feedback from courses delivered.
- Baseline information was taken from country planning meetings.
- Member countries need to develop or strengthen plans and policies on their respective national emergency preparedness and response strategies.

### 3.7.3 PEER Program Stage 3

NSET's proposed monitoring and evaluation (M&E) plan was submitted and approved by OFDA in 2009. The M&E plan for PEER Stage 3 Objective 3 emphasizes on the number of graduates developed, and program events completed. However, in the later part of program implementation, NSET realized that the existing PEER M&E plan needs to be improved in order to come up with a more concrete, quantified program results measuring the program impacts and make the program M&E in line with BHA Award Results Tracking System (ARTS). NSET's strategy in monitoring and evaluating program implementation was through interaction and feedback from in-country program focal points, PEER In-Country

Consultants, course reports from course coordinators and monitors, participants' course evaluations; sharing of experiences by partner countries, institutions and instructors during regional events such as Regional Planning Meetings (RPMs), and in national events like Country Planning Meetings (CPMs) and in related field visits by NSET professionals. All relevant information gained through interaction with our implementing partners serve as baseline information for monitoring and evaluation purposes.

An external monitoring and evaluation of PEER Stage 3 Objective 3 was done by an independent consultant from January to March 2014. The evaluation report presented the partnering countries' perception of the PEER program, and how PEER training and skills are being used. Based on the consultant's evaluation report, the overall results reflected that all concerned institutions and partner organizations recognize the full support provided by USAID/OFDA and NSET, as well as PEER instructors, during the five years of PEER Stage 3, in providing knowledge on MFR and CSSR and the stream of MFR and instructors' development courses.

### 3.7.4 PEER Program Stage 4

The Stage 4 external evaluation includes a review of PEER documents, analysis of the PEER course database, and interviews with Key Informants in Bangladesh, India, Nepal, and Pakistan. M&E plan for PEER Stage 4 Attributing to the global COVID-19 pandemic situation at the time, the interviews were held virtually, recorded, and transcribed for analysis.

# 4 PEER ACHIEVEMENTS AND IMPACT

## 4.1 Development of Emergency Responders/Instructors

The contribution of the PEER program in the South Asian and Southeast Asian region in enhancing the disaster response capacity of the region is extremely substantial. This chapter demonstrates PEER contribution in the region in terms of the number of responders developed under the PEER program, as well as the number of instructors developed who are responsible for training additional instructors and responders. The statistics are discussed in terms of various stages of PEER as well as the countries involved in the PEER program until date.

### 4.1.1 Progress of PEER by stage

#### ▪ Program Events by stage

Several courses have been implemented under the PEER program in the South Asian and Southeast Asian region for more than 20 years in 4 different stages. The courses run in various stages of the PEER program are demonstrated in **Figure 6**. We can see that MFR and CSSR were mostly done during stage 1 and 2 whereas HOPE was started from stage 2 only. Similarly, CADRE and SWR were implemented by NSET-PEER only on stage 4.

The figure below shows the different PEER courses that happened in different stages; however, the chart does not include the HOPE and CADRE stream of course events run under ADPC during stage 3 of the PEER Program.

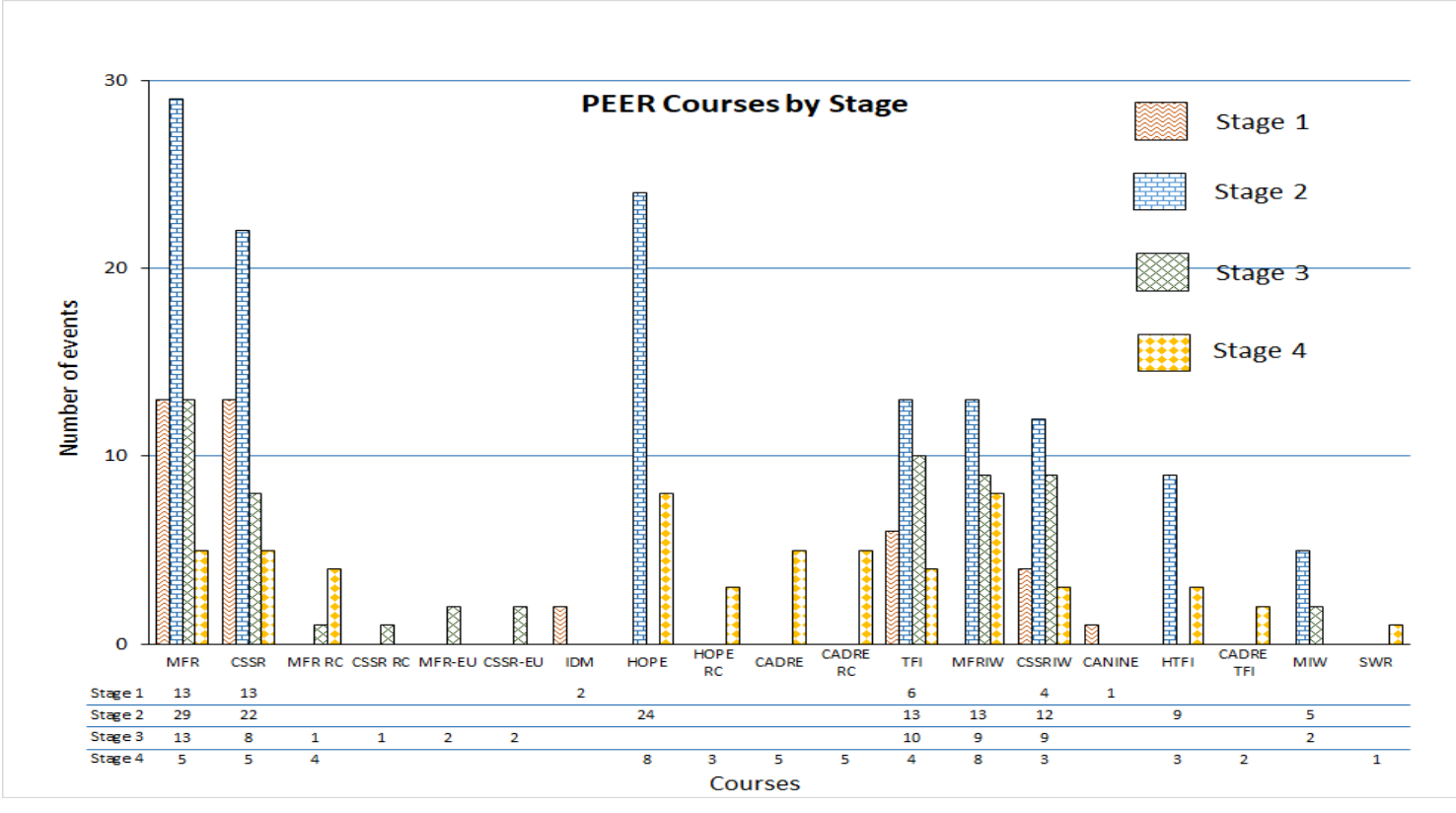



Figure 7: PEER Courses through various stages of PEER

## ▪ Number of graduates

The product of the events discussed in **Figure 6** are in the form of graduates and instructors developed under PEER. **Figure 7** demonstrates the number of PEER graduates developed under 4 stages of PEER in MFR and CSSR course streams. The figure below also shows how MFR and CSSR graduates were developed in huge numbers in stage 1 and 2 and gradually became lesser in later stages.

This figure shows about the number of PEER graduates of MFR and CSSR in different stages of PEER.

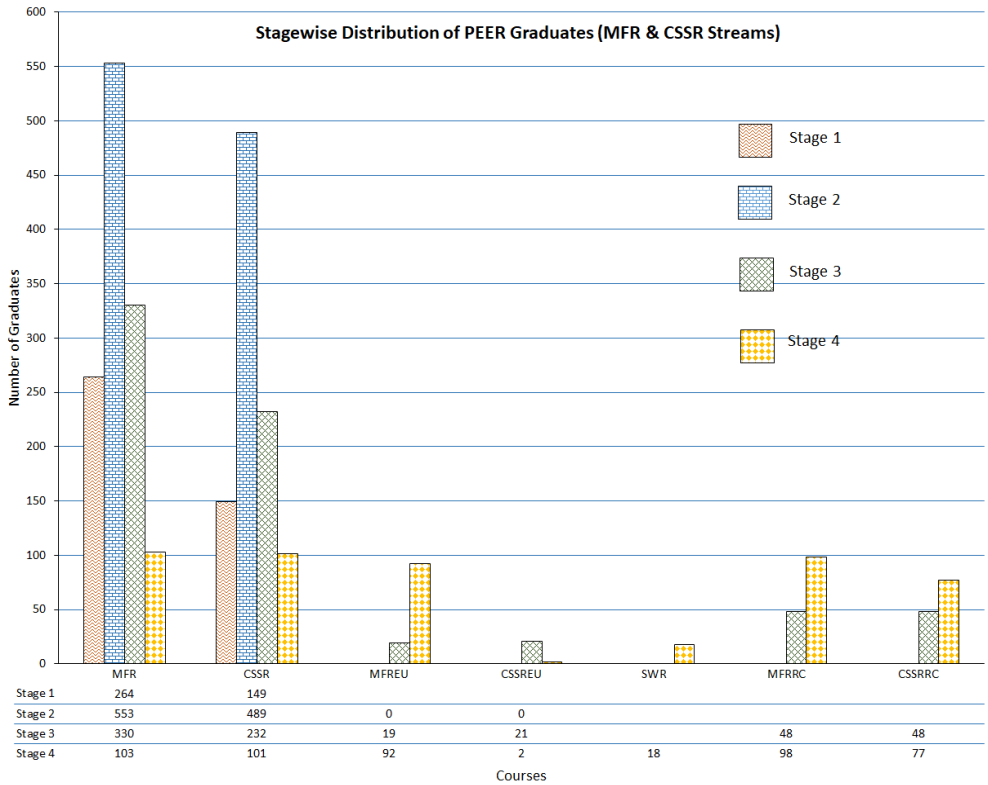



Figure 8: Total PEER Graduates - MFR and CSSR Streams

**Figure 8** demonstrates the number of PEER graduates developed under PEER in HOPE and CADRE course streams. In this figure we can see the number of HOPE and CADRE graduates from stage 3 and 4 where there were more graduates in stage 3 compared to stage 4.

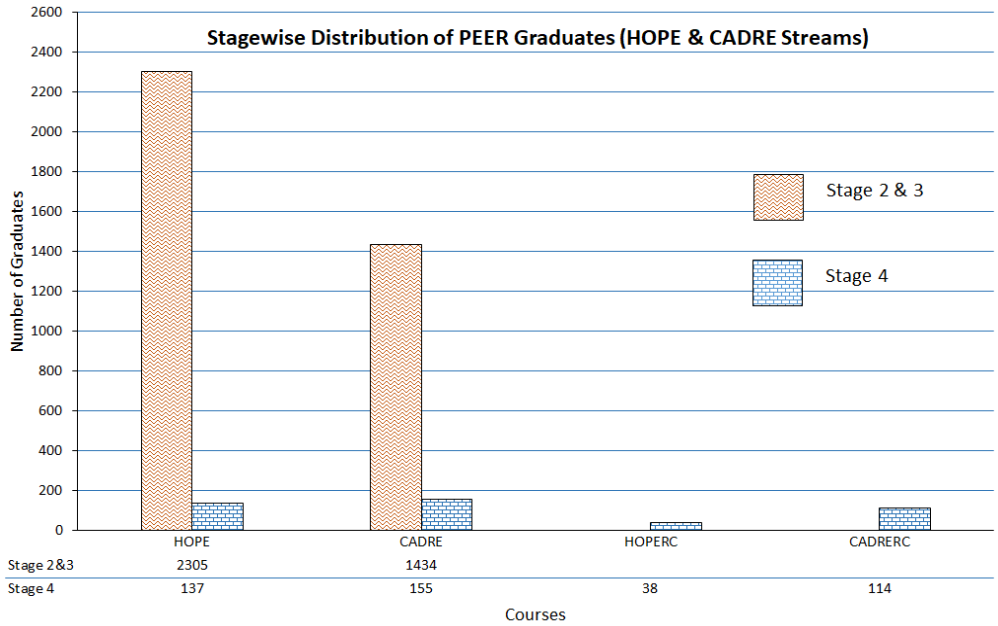



Figure 9: Total PEER Graduates - HOPE & CADRE streams

## Number of instructors

Along with the huge number of emergency responders developed under the PEER program, several instructors have also been developed. The instructors developed under the MFR and CSSR course streams are represented by the chart in Figure 9. It shows that number of instructors grew in stage 2 and 3 whereas the number of MIW graduates are much as compared to MFRIW and CSSRIW graduates.

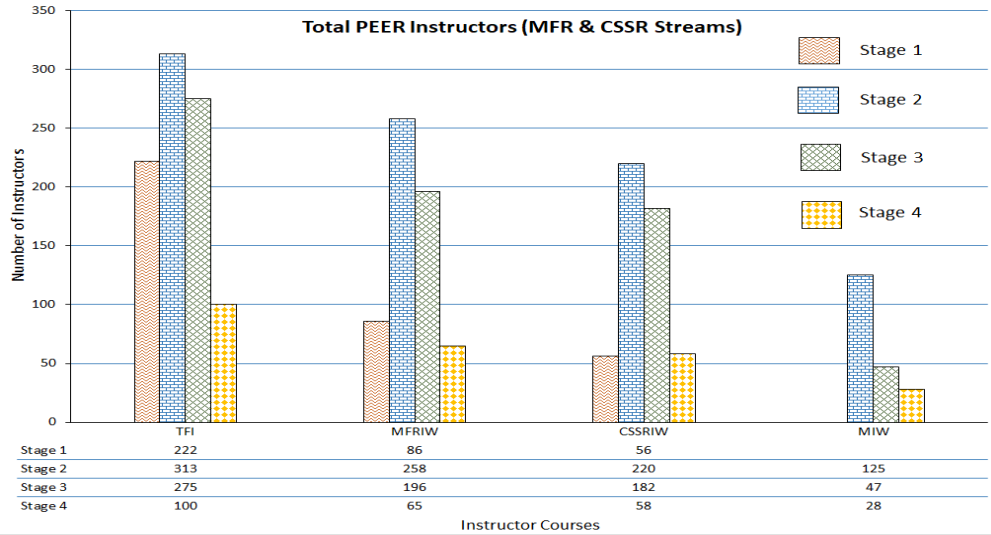



Figure 10: Total PEER instructors - MFR and CSSR streams

The instructors developed under the HOPE and CADRE streams are represented in **Figure 10**. A huge number of community instructors were developed from CADRE in stage 2 and 3 similarly it couldn't be continued in stage 4.

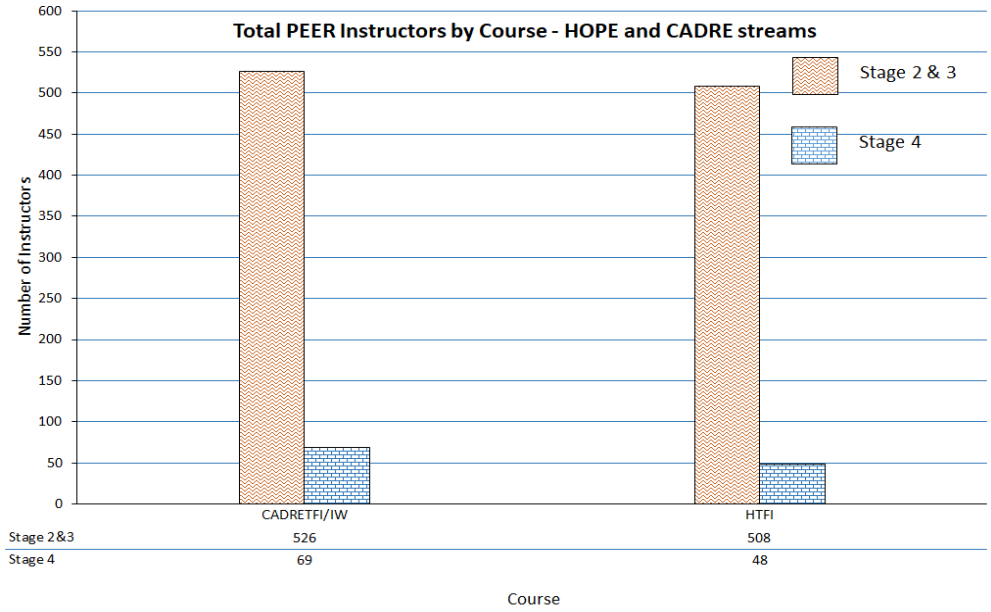



Figure 11: Total PEER instructors - HOPE and CADRE streams

## Other Countries

Several other countries have been involved in the PEER program besides the six that have been discussed earlier.

Southeast Asian Countries like Cambodia, Lao DPR, Vietnam, and Thailand have been involved in the development of HOPE and CADRE stream graduates and instructors, particularly during Stage 3 of the PEER program under the Asian Disaster Preparedness Center (ADPC) as implementation partner.

Figure 11 demonstrates the graduates and instructors under HOPE and CADRE streams from the Southeast Asian countries.

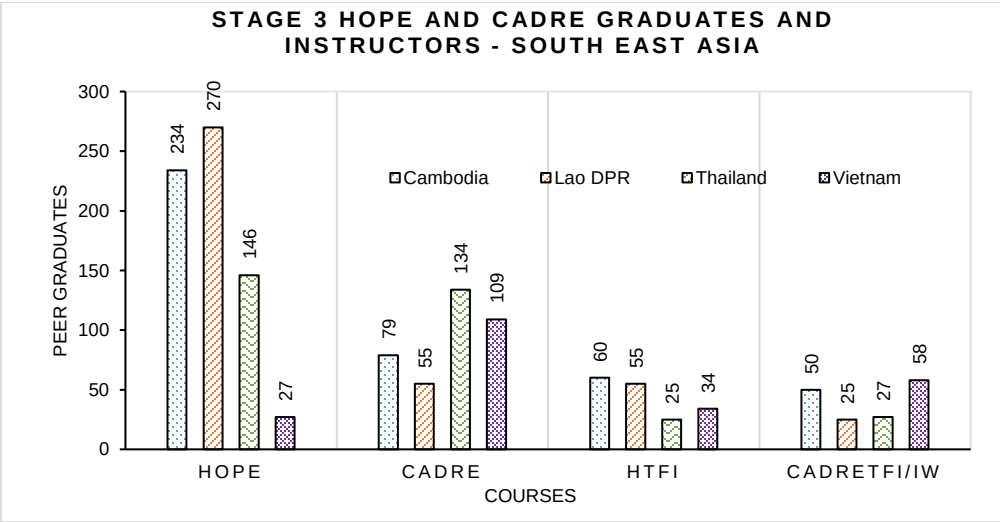



Figure 12: HOPE and CADRE Stream Graduates and Instructors from Southeast Asia

Similarly, starting in Stage 4, more South Asian countries indicated their interest in PEER programs and hence a few representatives from Afghanistan, Bhutan, the Maldives, and Sri Lanka took part in some of the courses under PEER Stage 4.

Figure 12 shows the number of graduates from the new PEER countries under PEER Stage 4. It also states the PEER graduates of different courses from new PEER countries.

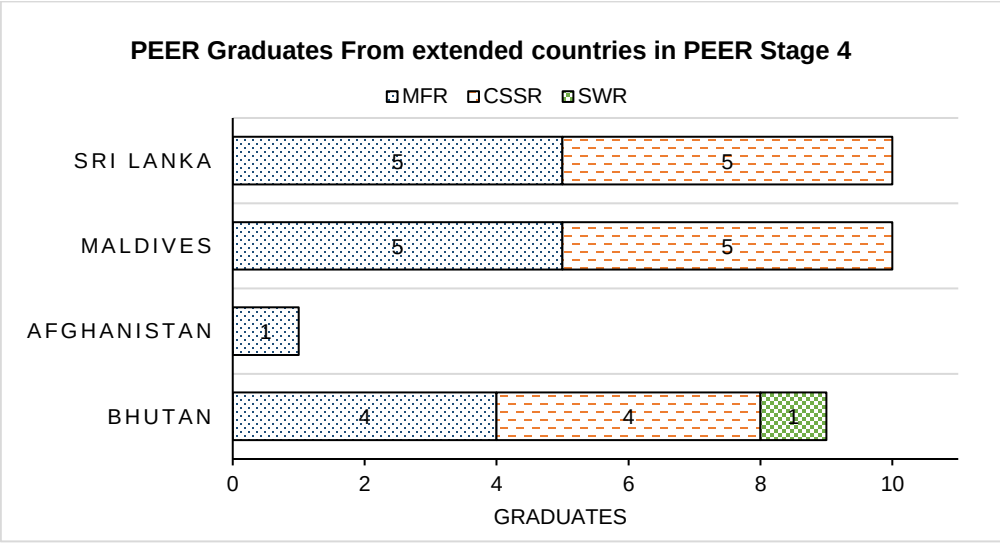
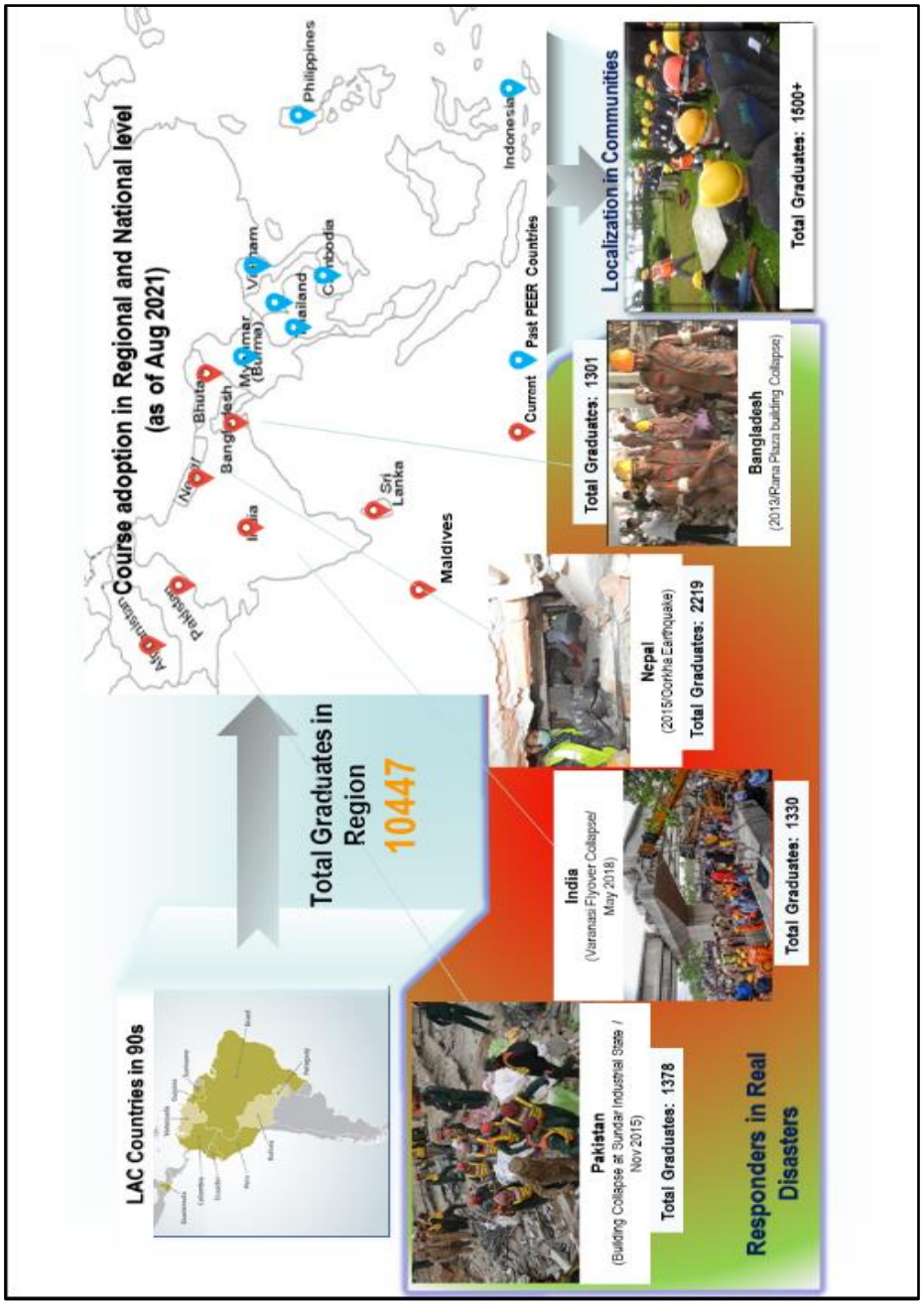



Figure 13: PEER Stage 4 - Further Involvement of South Asia in PEER

## 4.2 PEER Impact in the Region – Disaster Case Stories




*PEER in South Asia (as of Stage 4)*

### 4.2.1 PEER in Action

The direct influence of PEER courses on post-disaster case scenarios can be observed in various countries under the PEER program. A few significant case stories related to the impact of PEER in the region have been discussed in this section.

#### ▪ Bangladesh - Rana Plaza Building Collapse

The "Rana Plaza" building in Dhaka, Bangladesh collapsed on 24th April 2013 at 9:00 AM. It was a concrete building of 8 stories, the ground, and first floors were occupied by banking offices and market, and the remaining upper stories were occupied by garment factories. The major cause of the collapse was a structural failure because of overloading. The incident resulted in the death of 1,127 people in total. The building suffered a pancake type collapse – the building floors collapsed on each other leaving very little gaps between them, crushing the victims, and making it highly risky for the rescue teams to perform their operations efficiently. However, the rescue teams were able to rescue 2,458 people from the building.

The rescue operation was run by Fire Service and Civil Defense in 3 phases, with 200 Fire Service Personnel and more than 200 Fire Service Volunteers working together every day. The first phase of the rescue operation ran from 9:30 AM to 5: 30 PM on 24th April 2013. PEER Skills was applied in the Search and Rescue (SAR) – Hailing Search Method (Calling and Listening) and Horizontal Approach was applied. The second phase of the rescue operation ran from 5:30 PM on 24th April 2013 to 8:00 PM on 28th April 2013. PEER skills such as Hailing Search Method using calling and listening, Vertical SAR was performed by making holes, cell phones and information from various sources like relatives, bystanders, and colleagues were utilized in the search and rescue of victims in the second phase. The third phase of the rescue operation ran from 28th April 2013 to 20th May 2013. Mechanical Rescue was initiated in this phase. Heavy equipment such as cranes, excavators, hydraulic vibrators, etc. was utilized for SAR operations, under the responsibility of 9 Infantry Divisions of the Bangladesh Army. Huge volunteer support was observed in medical assistance, as well as in logistics.

We salute all stakeholders and volunteers who excellently and utmost dedicatedly performed and assisted in this noble cause, i.e., "Rana Plaza" Building Collapse Rescue Operation. Moreover, Bangladesh sincerely acknowledges the great support and praiseworthy cooperation of PEER-NSET which greatly helped us to strengthen our disaster management capacity.

MIW Workshop, June 2014

## ▪ Nepal – 2015 Gorkha Earthquake

Nepal was struck by a 7.8 Mw earthquake on 25th April 2015 at 11:56 AM with epicenter at Barpak, Gorkha, and this was followed by major aftershocks of 6.6 ML at 12:30 PM of the same day, 6.9 ML on 26th April, and 6.8 ML on 12th May. The tremors were felt all over Nepal, and affected Delhi and the Indian states of Uttar Pradesh and Bihar. The disaster left 8,970 people dead and 22,302 people injured in Nepal. Various security personnel from Nepali Army, Nepal Armed Police Force, and Nepal Police were mobilized for search, rescue and relief operations and they were either PEER graduates or were being led by PEER-certified responders. Additionally, a huge number of civil service personnel were also involved in the proper management of post-disaster operations.

**Mr. Dhakendra Khatiwada**

Then Inspector now Deputy Superintendent of Nepal Police, MFR & CSSR Graduate, 2008

None of us imagined the devastation of the Gorkha Earthquake would come so suddenly. When it happened, we were dispatched within 10 minutes of the earthquake. In no time we planned for our safety and started our operation in Gongabu and Balaju, which were the most affected areas in the valley. As devastating as it was, this was also a big opportunity for us to bring our Collapsed Structure Search and Rescue skills into use and we did it with a strong will and coordination.

It can be said that Nepal national responders acquired the basic search and rescue (SAR) skills through PEER; because of this foundation, national responders were able to assist and work side by side with international urban search and rescue (USAR) teams and understand the same guidelines and techniques in SAR operations, with

the same goal of searching, rescuing victims using the safest techniques and eventually saving lives. However, the main difference among the national and international SAR teams was the use of heavy-duty and more sophisticated SAR equipment by the international teams. Some national response teams worked independently on-site and also assisted the international USAR teams as the former had a better understanding of the locale. The Medical First Responders' (MFR) and Collapsed Structure Search and Rescue (CSSR) were adopted in the training of security forces in Nepal, and Community Action for Disaster Response (CADRE) was implemented at the community level by Nepal Red Cross Society.

This event is one of the prime examples of regional collaboration, among PEER countries as well, where rescue teams from the Philippines, Bangladesh, India, Indonesia, Pakistan, and many other countries worked together with a common goal of saving lives. Such extensive collaboration must certainly be encouraged and promoted in the region such that the loss of lives in future disasters can be minimized to a greater extent.

## ▪ India - Flyover Collapse in Varanasi

An under-construction flyover in Varanasi, India collapsed over moving traffic on 15th May 2018 at 5:45 PM, which left 18 people dead and 22 injured. The flyover was supposed to connect Lahartara to Chauka Ghat with a total length of 2.26 kilometers. Pillars were constructed and the beams were being placed on pillars at the time. Because of the lack of space, no service lanes were prepared, and the traffic from both sides could move freely. At the time of the disaster, due to the failure of the holding bearing, two horizontal beams of the flyover under construction fell over the vehicles passing under it. One bus, two Bolero jeeps, two hatchback cars, and one auto-rickshaw were immediately crushed below the hefty beams. The surface victims were extricated by the local community, while the National Disaster Response Force (NDRF) was informed for specialist response.

**India Representative, MIW Workshop, June 2014**

The NDRF was trained on PEER adapted training courses, and the activation, mobilization, scene security, situation assessment, request for resources, triaging, gaining access to victims, extricating the victims, transport preparation and reporting were all performed as per the training provided by PEER. We are very grateful to PEER for providing the necessary training, and we have adopted the PEER training methodologies into our own training programs.

The rescue operations were carried out by 2 alert teams of 11 NDRF initially. Later, 5 more teams from NDRF joined the task force. The local police were also assisting in controlling the crowd and clearing the site for an effective rescue operation. The NDRF teams isolated the worksite and started the manual search for live victims as soon as they arrived at the site. They located 3 live victims trapped inside the vehicles under the heavy beam. It was very difficult to extricate the victims without lifting or breaking the beam, however, the beam was so heavy that it could not be lifted using multiple cranes, so it was lifted portion by portion and kept suspended to avoid further damage. In total, 3 live victims and 18 dead victims were extricated by the NDRF teams. After the extrication and evacuation of those victims, the site was rescanned thoroughly and on confirmation of no additional victims remaining, a completion report was issued, and the rescue operation was called off at 9:30 PM on 15$^{th}$ May 2018.

## ▪ Indonesia - Padang Earthquake, 2009

The September 30, 2009, Sumatra earthquake that occurred off the southern coast of Sumatra, Indonesia had a magnitude of 7.6. This jolt struck Padang (West Sumatra). Reports have to date confirmed 1,115 dead, 1,214 severely injured and 1,688 slightly injured. Several agencies, domestic and international, took part in extending assistance to Padang. 118 Emergency Ambulance Service (EAS) Foundation (also known as Ambulance 118) was one among the groups to respond first. Having applied CSSR knowledge and skills, Ambulance 118's CSSR team was able to extricate trapped victims, both alive/injured and dead. Amid challenges faced during the disaster response operations in Padang, PEER's impact on the country's improved emergency response cannot be understated.

## ▪ Pakistan - PEER enriches life-saving skills of Rescue 1122

Overall, Rescue 1122, one of the partnering institutions of PEER in Pakistan, acknowledged the benefits gained from the program with improved lifesaving skills rendered by its


Rescue 1122's rescue and relief operations during the floods in Pakistan in 2010

Source: https://tribune.com.pk/story

PEER-trained personnel who are involved in day-to-day operations responding to emergencies to large-scale disasters such as during the major floods in Pakistan from 2010-2013. In addition to the response to floods, Rescue 1122 has been actively involved in several emergency cases like road traffic accidents/crashes, fire, building collapse, explosions, crime, medical trauma, and similar cases.

## ▪ Philippines - Experience with Typhoon Haiyan, 2013

Typhoon Haiyan made landfall in the Philippines on November 8, 2013, with maximum sustained winds of 320kmph with gusts up to 380kmph. It created huge storm surges in the Provinces of Samar and Leyte in the Eastern Visayas which caused many human casualties. The 320kmph winds caused damages to lifelines – power supply, water supply, communications, transportation, and government infrastructure. It left the industry, trade, and services in the affected area completely paralyzed. There were prepositioned assets that were wiped out by the typhoon, and unfortunately, the frontline responders on the ground also became victims of the typhoon. As of mid-2014, there were around 3.5 million families and 16 million people were affected by the typhoon, with around 6,300 deaths, 29,000 injured and

1,800 missing. More than a million houses were damaged with more than half of those completely damaged. An estimated 90 billion pesos were accounted for in damages caused by the typhoon.

The response operations were led by PEER trained MFR/CSSR graduates from various institutions like the Armed Force of the Philippines (AFP), Bureau of Fire and Protection (BFP), Office of Civil Defense (OCD), and the Department of Health. The response to this disaster helped the Philippines understand its shortcomings in disaster risk management, and paved the way for improved response plans, policies, and systems. They realized the need for improvement on an integrated and coordinated Search, Rescue, and Retrieval system and preparation of a well-established, known, and standardized set of systems, procedures and policies during disaster response and relief operations.

## 4.3 PEER Influence in the Region

The influence of PEER in building the disaster response capacity in the South and Southeast Asian region has been quite extensive. In addition to the major case stories discussed in the earlier section, the influence of PEER in the PEER-affiliated countries and the surrounding region shall be discussed in detail.

> "I went into the house and saw a 13-year-old boy with disability sitting on a chair. He was alone at home, in danger of drowning in the flood water and calling for help. "Using the fireman's carry technique, I lifted the boy on my shoulder. It was difficult to carry him in the water, but I got him on my tricycle and drove him to the Barangay Mambulac clinic for treatment," Chongo tells, adding that the training taught him a lot about dealing with victims of flooding, vehicle accidents and fire. "Had I not taken CADRE, I wouldn't have known the right way to deal with the situation. I probably would have dragged him out of the house, which could have caused him severe injuries. The boy's family was grateful to me for having saved their son.
>
> Jessie Chongo, CADRE Graduate Philippines

### 4.3.1 Bangladesh

- **Rescuers Save 85 People from Collapsed Building in Bangladesh, April 2005**

Fire Service and Civil Defense (FSCD), MFR-CSSR partnering institution in Bangladesh, plays a laudable role in responding to various disasters in the country. On April 11, 2005, a 9-storey garment factory outside of Dhaka (Shahrier Spectrum Garments Industries) collapsed and trapped 200 people beneath tons of rubble. Rescuers from FSCD launched the rescue operations, joined by the Army, Police, Scouts, Ministry of Health, and other volunteer organizations. The rescue teams reported that they were able to save 34 people from the rubble and extricated 46 dead.

The report also cited that most of the rescue equipment used by FSCD during the rescue operations was donated by the US government in July 2004, in line with the implementation of PEER in Bangladesh. One of FSCD's personnel admitted that the rescue equipment was intended for training purposes but emphasized that *"the operation would not have been possible had the US government did not grant us the equipment."* The PEER-trained FSCD personnel conveyed that the skills learned from their MFR and CSSR training were applied during their operations in said collapse incident.

While this Savar tragedy confirms the effectiveness of PEER training in collapsed structure search and rescue and medical first response, it also confirmed the urgency for governments to further support, nationalize and sustain such training and to ensure the necessary equipment is made available to those who risk their lives to save others in such disasters.

- **PEER-trained Rescuers in Phoenix Tragedy, February 2006**

FSCD PEER-trained response personnel were once again involved in the response operations during the collapse of the Phoenix building in Tejgaon, Dhaka, on February 25, 2006, that trapped around 150 people beneath the rubble. FSCD team, along with Army, Police, Scouts, Ministry of Health, and other volunteer organizations conducted the operations. As per reports received, 14 people were extricated alive from the rubble and retrieved 8 dead victims.

- **PEER graduates in Bangladesh at rescue in Landslides at the port city of Chittagong and its surrounding areas, June 2007**

In June 2007, a series of devastating landslides due to heavy rainfall (heaviest at 227 mm that time, as recorded by Chittagong Meteorology) occurred in the port city of Chittagong and its surrounding areas. FSCD personnel including those who received training under PEER, conducted search and rescue operations, provided emergency medical aid, shifted the injured to medical facilities, etc. FSCD personnel, along with the Army, Police, City Corporation, Red Crescent, and other non-government organizations combined efforts to rescue the injured and recover bodies.

- **Other response operations of PEER-trained responders from FSCD in Bangladesh:**

Rangs Bhaban, Tejgaon, Dhaka, 2007
**Deaths: 26**
**Lives saved: 6**

Begun Barri, Dhaka, 2010
**Deaths: 25**
**Lives saved: 6**

### 4.3.2 India

- **Mumbai Building Collapse, June 2005**

PEER trained rescuers from Mumbai Fire Service worked non-stop for 14 hours. Four women were killed, and five other persons injured when a three-story building

collapsed in Suburban Khar after incessant rains lashed the metropolis, Fire Brigade sources said. The 40-year-old building, 'Pushpanjali', collapsed shortly after 10 PM. Most of the flats were being used for residential purposes while the building also housed a chartered accountant's office, the sources added. Mumbai Fire Brigade was a partnering organization during PEER Stage 1 (1998-2003).

## ▪ CISF Response at Andaman and Nicobar Islands, Tsunami 2004

Central Industrial Security Force (CISF) is one of the four PEER partnering institutes in India, for implementing MFR and CSSR courses. CISF team was deployed in Andaman and Nicobar Islands during the tsunami of 2004. The team's work objectives focused on searching, locating, accessing, stabilizing, and extricating tsunami-affected victims (from said areas) using the most appropriate and safe methods.

In one of the sharing sessions of PEER Master Instructors Workshop (MIW) in 2006, the PEER-trained team from CISF enumerated the strengths of the program (in the context of their experience during the tsunami operations) as follows:

- All PEER courses are useful and have been designed in a systematic and effective manner
- The interactive training approach takes care of learner's attitude and capabilities
- Monitoring of courses enhances effective learning
- These courses provide a platform to formulate disaster management team

## ▪ PEER and Mumbai Fire Brigade (MFB) Response, AUGUST, and November 2008

MFB team led by Mr. Prabhat Rahangdale, a PEER-certified graduate/ instructor, displayed conscious bravery, exemplary courage, leadership, professional expertise, and devotion to duty of very high order during the entire rescue and firefighting operation at Trident and Taj hotels from November 26$^{th}$ to November 29$^{th}$, 2008, despite grave danger to our lives. People who would have otherwise perished of terror attack, suffocation, and heat due to fire were rescued as a result of the courageous service the Fire Brigade members displayed and who did so at great personal danger. Because of the quick firefighting, both hotels' property losses were significantly reduced.

### ▪ MFB Response in other disasters

MFB response personnel also responded in other disaster events. In August 2008, during the monsoon season, the embankment of Koshi River, Nepal's biggest river, was inundated, flooding several villages in Sunsari District (Eastern region of Nepal, bordering India's State of Bihar). The Koshi River has subsequently altered its flow and continues to flow for the most part along this new course, inundating four Village Development Committee (VDC) areas bordering India and large sections of the state of Bihar (India), where it runs in an uncontrolled 15-20km wide flood up to 60km east of its previous course. The flood rescue team deputed for rescue and relief operation from 31 September to 11 October 2008. The team successfully rescued hundreds of persons from flooded Sahars District, Bihar.


MFB personnel response operations during the floods (brought about by inundation of Koshi River) at Bihar State, India, August 2008.

The PEER-trained team leader acknowledged that these manifestations of abilities in rescue operations perhaps were made possible because MFB has adapted PEER. After completing MFR-CSSR courses and related streams, he cascaded his PEER experience with MFB. With available resources, the first Task Force were trained with TFI, MFR, and CSSR courses. Also, MFB is the first brigade in India to establish EMS where ambulances are manned by MFR-trained personnel, 120 personnel manning ten ambulances were trained in MFR.

## 4.3.3 Indonesia

### ▪ Mosque Collapse, Jakarta, December 2005

On December 21, 2005, a mosque in north Jakarta collapsed during prayer time. There were around 25 people trapped in the rubble. Rescuers from Ambulan 118 immediately responded and rescued a total of 11 trapped victims, 4 of whom were dead. The rescue operation was led by the North Jakarta Fire Service with assistance from Ambulan 118, Police, and other volunteer organizations. With the skills and

knowledge still fresh in the minds of the Ambulan 118 crew, they have applied rescue strategies and techniques acquired from PEER and utilized donated training tools and equipment for the rescue.

### ▪ Banda Aceh Tsunami 2004

One of the worst natural disasters in history was the Tsunami 2004 that caused devastation in terms of lives lost and property damage. Ambulan 118, BASARNAS, Indonesia Fire Services (PEER partnering organizations in Indonesia for MFR and CSSR courses) were deployed for response operations during the tsunami in December 2004. Ambulan 118 has particularly identified key lessons learned and what can be done more in the future (in the context of PEER), and these are:

- Strengthen national and regional Emergency Preparedness and Response Program
- Capacity building of health personnel (management, technical) including simulation and rehearsal. Ambulan 118 also made mention of MFR and CSSR courses for pre-hospital emergency responders and HOPE courses for hospital personnel as training requirements.

### ▪ PEER in Java, Yogyakarta Earthquake 2006

Similarly, Ambulan 118 and BASARNAS responded during the Yogyakarta Earthquake on May 2006. Unfortunately, Yogya emergency personnel had not received HOPE training prior to the earthquake and hospitals needed much support. Since Yogyakarta is relatively close to Jakarta and all necessary infrastructures were intact, a HOPE-trained group arrived on Day 1 and immediately put HOPE prescribed procedures in place in all hospitals in Jogya and Bantul. By day 3, everything was under control and all hospitals were rendered functional.

## 4.3.4 Nepal

### ▪ Disaster Management in Hospitals

#### A Case Study from Tansen Hospital, Nepal

Tansen Mission Hospital (TMH) responds to numerous multiple-casualty incidents (such as vehicular accidents) in the region, covering its catchment's population of almost one million. Most of the senior doctors in TMH have had experience dealing with these mass-casualty incidents. This hospital has a disaster plan (set up in 1997) to deal with such MCIs, addressing issues like triaging, patient reception areas, and

allocation of duties. There were two HOPE course graduates from TMH who had initiated sharing HOPE course concepts in their health facility.

Below are some of their observations from the HOPE course and have applied in their own setting:

- Clear leadership and making sure the staff followed instructions.
- Colored area teams have own briefings, and clear understanding of each person's duties and responsibilities well before patients arrive.
- Crowd control issues were minimized, for example, the media were intercepted and asked to wait in one area while a hospital administration officer was assigned the task of briefing them.

As an offshoot of the HOPE course and based on their experiences, below are some concepts that the HOPE graduates planned to initiate:

- Setting up a disaster preparedness committee for TMH, to review the plans and processes and effect recommendations
- Set up teaching sessions on triaging, basic trauma management for medical and paramedical staff
- Set up a meeting with the hospital administrators, jeep transport committee members, nearby hotel owners, the hospital security, local media personnel to explain to them why we need their help and how they can help to ensure that we run a smooth operation.

## ▪ Disaster Plan revised by the Institute of Medicine

### Teaching Hospital, Tribhuvan University, Kathmandu, Nepal

Hospital Preparedness for Emergencies – Tribhuvan University Teaching Hospital (HOPE-TUTH) Committee was formed with several members who were HOPE graduates. A comprehensive disaster plan was finalized according to the Hospital Emergency Incident Command System (HICS) taught in the HOPE Course. With TUTH's experience in disaster drills and day-to-day hospital operations, below are some of their observations in relation to the integration of HOPE in their hospital preparedness:

- HOPE can be implemented successfully in the hospitals with the help of a dedicated and cooperative team
- It can be inexpensive, and it is best to use the facilities, and materials and the manpower of the hospitals

- The less the requirement from the administrators/government, the easier and faster the work gets completed (they made their own triage tags and most of the materials)
- It really works and helps to save large number of patients in disaster

## ▪ Other HOPE inspired stories

HOPE course inspired participating health organizations to formulate their own functional hospital disaster preparedness plans, such as in Patan Hospital and B&B Hospital, both in Kathmandu Valley; and Scheer Memorial Hospital in Banepa Municipality. These plans, in turn, are reviewed and tested through the conduct of simulation exercises/disaster drills. B.P. Koirala Institute of Medical Sciences, Dharan, has conducted an emergency drill, as an offshoot activity from the HOPE course. After completing the HOPE course, some have taken initiatives in drawing out hospital preparedness and response plans, and sensitizing hospital management and personnel on hospital preparedness - a positive sign in the growing awareness on the importance of hospital preparedness for emergencies.

## ▪ Participation of Nepal PEER graduates in trainings and disaster simulation exercises

In other disaster preparedness activities, MFR and CSSR graduates from Nepali Army and Nepal Police actively participated in the INSARAG Asia-Pacific Regional Earthquake Response Simulation Exercise held at Kathmandu on April 21-24, 2009. PEER instructors and graduates in Nepal, just like those from other countries, also participated in national and internal training, seminars, workshops, and exercises.

PEER is also being adapted in the disaster management training programs of the four partnering organizations in Nepal (Nepali Army, Nepal Police, Armed Police Force, and Nepal Red Cross Society).

## ▪ Nepali Army

Nepali Army has been serving the country in difficult situations, such as earthquakes, landslides, floods, wild and urban fires, and disasters in high altitude areas. It plays a significant role during mega-disasters in Nepal. Nepali Army is always dedicated to the nation and its people and DRR is one of the areas that the Nepali Army responds promptly to.

The Directorate General of Military Operations (DGMO) is involved in all kinds of operations among which disaster response operations is one of them. The

Directorate of Disaster Management under the DGMO is the dedicated directorate for DRR activities, which has two dedicated battalions deployed in different locations and a Disaster Management Training School has been set up in Kathmandu. The personnel are trained and prepared to respond to various kinds of disasters in Nepal. The courses under the PEER program are among the training courses rendered to the Nepali Army personnel and those courses are found to be very useful, especially in the field of search and rescue. The PEER graduates are tested in several incidents in the past who exhibited their professional skills efficiently. The devastating Gorkha Earthquake in 2015 is one of the examples where the PEER-trained personnel performed at par with the international SAR teams. Considering the importance of the PEER program, the PEER courses are being conducted in the Disaster Management Training School of the Nepali Army.

## ▪ Nepal Police

Nepal Police, with its extensive policing network throughout Nepal, serves as the front-line responder to any kind of disaster in Nepal. Nepal Police mobilizes its resources for preparedness and response under the Department of Operations in Police Headquarters. In the event of a disaster, police personnel from Nepal Police are generally the first ones to scene size up, gather information, and coordinate, collaborate, and initiate rescue efforts. Also, they are usually the last ones to mop up the area and build confidence and ensure security in the community.

Within the structure of Nepal Police, there is a dedicated Disaster Management Division (DMD) at the central level and there is one company for disaster management at the provincial level. The reserved units of Nepal Police such as battalions, companies, and platoons are also deployed whenever it is required to augment and respond to a disaster.

As the nodal agency for disaster management in Nepal, the Ministry of Home Affairs (MoHA) has designated Nepal Police to serve as the Focal Point institution and the National Police Academy (NPA) was identified as the focal training center to conduct MFR and CSSR under PEER program. After the signing of the Memorandum of Understanding (MoU) between PEER/NSET and Nepal Police, Training Directorate, several courses were conducted at NPA for the security forces including Nepali Army, Nepal Police, and the Armed Police Force, Nepal. These standardized courses conducted under the PEER program have proven to be very useful in enhancing preparedness and response to increase the survival rate during the disaster, as it was witnessed during the devastating Gorkha Earthquake 2015 in Nepal.

Currently, the organization has assimilated MFR and CSSR courses modules into Police training courses while also maintaining the standard training procedures and training curricula of MFR and CSSR in the dedicated disaster management courses that are institutionalized as a part of the Annual Police Training Calendar of Nepal Police. A good number of police officers have graduated as trainers and responders under this program, and they are being absorbed in the field of DRR who have been regularly mobilized during disaster situations and have been performing very well in their line of duties. It is evident and widely acknowledged that the PEER graduated police personnel have exhibited their learned knowledge and skills efficiently in several crises, most notably after the devastating Gorkha Earthquake 2015.

### ▪ Armed Police Force

Armed Police Force, one of PEER partnering organizations in Nepal, is a paramilitary force mandated in maintaining law and order, containing insurgency, and cracking down terrorist activities. In addition to these primary roles and responsibilities, APF has also been tasked by the Government of Nepal to respond to disasters.

At present, APF is pursuing training of instructors and responders from its core of personnel towards efficient rescue and relief operations. It is worthy to note that MFR and CSSR courses are part of their training curriculum, in addition to Dead Body Management after Disaster, Fire Fighting, Swimming, Rafting, Water Rescue, Climbing, and Rappelling.

## 4.3.5 Pakistan

### ▪ PES/Rescue1122's contribution to emergency disaster response

PEER instructors from Rescue 1122 have also been engaged in other response trainings of the Punjab Emergency Services Academy:

- Firefighting
- HAZMAT (hazardous materials)
- Water Rescue
- Community safety training program for schools, Community Safety Officers & teams, Punjab Emergency Council, District Emergency Boards

#### PES/Rescue1122's journey to INSARAG Classification

The Pakistan Rescue Team of Emergency Services Academy (Rescue 1122) Lahore became the first UN – INSARAG Classified team in South Asia after completion of an extensive evaluation procedure spanning several years under the supervision of

UN-INSARAG mentors in October 2019. The PEER skills and system worked as the foundation in this process. The PEER graduates were handed the lead responsibilities for successfully attaining the certification as a UN INSARAG classified team.

### 4.3.6 Philippines

- **Networking and Deployment of PEER Graduates for Disaster Preparedness and Response**

Source: https://www.facebook.com/phredcross

Most of the Filipino PEER graduates are members of organized search and rescue (SAR) groups/ first responder agencies like (BFP), Philippine Red Cross (PRC), Metro Manila Development Authority (MMDA), Emergency Rescue Unit Foundation (ERUF), Amity Public Safety Academy (APSA), Office of Civil Defense (OCD) and Armed Forces of the Philippines (AFP). Together with other SAR groups, they had been mobilized to respond to disaster events such as the Quezon and Guinsaugon landslides on November 14 – December 3, 2004, and February 17, 2006, respectively; ULTRA Stampede on February 5, 2006, Typhoon 'Reming' on November 28 - December 3, 2006; Typhoon 'Frank' on June 18-23, 2008, and the latest major typhoons that successively hit the country, namely, Tropical Depression 'Ondoy', and Typhoon 'Pepeng' on the last week of September and 1st week of October 2009, respectively.

During normal times, they continued working with the government's National Disaster Coordinating Council (NDCC) - now known as National Disaster Risk Reduction and Management Council (NDRRMC) - in its capacity building efforts through training of SAR groups in achieving the goal of reducing mortality in mass casualty incidents and increase the survival rates of disaster victims.

They have also participated in several disaster simulation exercises to share skills, be updated on latest guiding principles, techniques and strategies on SAR operations, stand-by arrangements and standard operating procedures in humanitarian assistance and disaster relief at the national, regional, and international levels. Also, their engagement in these multilateral exercises like the INSARAG Asia-Pacific

Earthquake Response Exercise in April 2008 and 2011 and past ASEAN Disaster Simulation Exercises (ARDEX) have expanded their networking with other local and international SAR groups.

## ▪ Philippines Strengthens MFR-CSSR-HOPE Networking

Towards the culmination of PEER Stage 2 in January 2009, NSET in collaboration with the Office of Civil Defense-National Disaster Coordinating Council, and other implementing partners in the surrounding region, conceptualized a disaster drill to test, gauge, and assess the response capabilities of both the pre-hospital and hospital responders in the Visayan region. The drill was named 1st NSET-PEER-Coalition of Emergency Response Groups (CERG) - Western Visayas (WV) Response and Networking Drill.

The said drill was conducted on July 3, 2009, in conjunction with the observance of National Disaster Consciousness Month in the Philippines. The scenario simulated a 7.3 magnitude earthquake hitting Kabankalan City, Negros Occidental, at around 9 AM, causing considerable damage to the city's district hospital and various parts of the city. The drill ensued with MFR-CSSR and HOPE trained personnel leading the response, along with emergency response units of participating local governments, such as the fire department, police, Red Cross, Negros Rescue Foundation; volunteer groups such as the Amity Volunteer Fire Brigade; local health and hospital personnel. Local leaders, VIPs, representatives from the Regional, Provincial, and City Disaster Coordinating Councils; Provincial Disaster Management Office, Provincial Health Office, civil defense deputized coordinators, media, and the community were also present during the exercise to observe and extend valuable support to the activity.

The simulation exercise aimed to put the 3 core courses of PEER to test as one continuum of response, gathering all response efforts of both pre-hospital and hospital-based responders. It also tested the emergency response system of the local government.

Overall, the drill was considered a success, based on evaluation, observations, and critique. The organizers resolved those similar exercises in the future will enhance and will become the template for future disaster drills in Negros Occidental, Philippines.

## ▪ Abridged versions of MFR and CSSR courses for other groups

Building upon the quality content of PEER training programs, the Fire National Training Institute (FNTI) has adapted the MFR and CSSR courses into abridged

versions, included in FNTI's training programs for recruits of the Bureau of Fire Protection, cadets of the Philippine National Police Academy and Philippine Navy.

- **Other Trainings and Response Activities by PEER-trained individuals in the Philippines:**

Emergency response trainings have been conducted for other organizations conducted by PEER instructors from Amity Public Safety Academy, one of the PEER institutions in the Philippines:

- MFR for Rescue 625 (Escalante City)
- Community-level training for Knights of Columbus
- Basic emergency response training for Philippine National Police

Similarly, the PEER-trained personnel of the Philippine Red Cross have also been engaged in Water Rescue, basic firefighting trainings, and have also engaged in response to vehicular accidents, collapsed structures, and in other rescue operations.

### 4.3.7 Social and Gender Impact

Women, children, people with physical disabilities, and the elderly are some of the most vulnerable groups of people in the event of a disaster, in different countries of Asia that are highly prone to such events. Disaster awareness among these groups becomes paramount to the success of any emergency disaster response effort. PEER program has been inclusive as much possible and actively encourages participation of these groups in various community level disaster awareness and disaster response training programs in an effort to alleviate some of the concerns of the vulnerable group and help make them self-sufficient in the event of a disaster.

### 4.3.8 Demand Creation for trainings

The increase in demand for training programs, especially at the lower levels of the nation such as municipalities, local governments and private institutions means an increase in the number of emergency responders available on site at the local level. The successful implementation of PEER courses in the region has influenced several institutions to take up the courses into their own training regimen. PEER has created an environment that has enabled local institutions in the region to adopt and adapt PEER training programs in their own ways, with proper technical assistance on curriculum development and equipment provision from the implementing agency.

### 4.3.9 Interest of expansion to other countries

There has been a growing interest, especially among the South Asian countries not involved with PEER previously, to be involved in the PEER program in the future. Small steps have already been taken as few representatives from Afghanistan, Bhutan, Maldives, and Sri Lanka have taken part in some of the PEER courses. The success of the PEER program has influenced these countries to be involved in the emergency/disaster response training through the PEER program in the future. The state of progress in the potential PEER countries has been properly addressed in Messages from extended group of PEER countries in Chapter 6.

### 4.3.10 Professional development and networking

The graduates of the PEER program who have been actively involved in emergency/disaster response today have continuously owed much of their success to them taking part in PEER courses earlier. The PEER courses are designed not only to make better emergency responders but also to help in creating a better professional.

**Dr. Maria Felicita Regala**

PEER Course Monitor, MFR

I really appreciate the opportunity given by NSET to take part in PEER courses. After going through a series of instructor courses, I became a PEER instructor, course coordinator and finally a course monitor. Through the help of these courses, I have built a lot of confidence, developed my interpersonal skills among colleagues, students, and course participants alike and I am able to provide criticism and feedback in a constructive and productive manner. Moreover, PEER has helped me work as part of a team and shown me the power of collaborative effort.


Instructors observing the skills implemented by participants during CSSR.

# 5 INSTITUTIONALIZATION OF PROGRAMS

## 5.1 Integration of PEER programs by PEER countries

The general status of institutionalization of PEER courses in different countries at the current stage has been provided in Table 3.

Table 3: Current Status of Institutionalization of PEER courses

| PEER Countries | MFR and CSSR courses | HOPE | CADRE | SWR |
|---|---|---|---|---|
| Bangladesh | Integration of MFR and CSSR curricula in the internal training program of Bangladesh Fire Service and Civil Defense (FSCD).<br>Adopted MFR and CSSR courses in the regular training calendar of FSCD.<br>PEER courses as guidelines for their internal courses. | Adapted version available; integrated in other development programs (SERB program in Bangladesh). | CADRE course curriculum has been considered as a reference for emergency response training for volunteers by FSCD. | |
| India | Adopted MFR and CSSR courses in the regular training calendar of National Disaster Response Force (NDRF) battalions.<br>PEER courses as guidelines for their internal courses and basic training for India's central paramilitary forces – CISF, BSF, CRPF and ITBP. | Growing interest: Private hospitals have been involved and taking initiation. | High potential to institutionalize for community empowerment.<br>NDRF has included CADRE as one of the emergency response courses, and has been conducting CADRE courses | NSET received expression of interest from NDRF India to align its internal Water Rescue Course with PEER SWR curriculum. |

| PEER Countries | MFR and CSSR courses | HOPE | CADRE | SWR |
|---|---|---|---|---|
| Nepal | Establishment of Disaster Management Training Schools in all security forces (Nepali Army, Nepal Police, Armed Police Force); MFR and CSSR courses have been considered as foundation skills and have been incorporated in the regular training calendar of these security forces.<br><br>Establishment of Nepal APF Disaster Management Training School, with facilities as per PEER training guidelines. Eventually, the physical structure was then named the PEER building. | Institute of Medicine (IOM) of Tribhuvan university has taken the lead in Nepal.<br><br>Some HOPE courses have been conducted outside of PEER support.<br><br>Disaster Management plans have been prepared as per the HOPE guidelines.<br><br>Expertise provided for HEOC Nepal. | Gained support from other donors.<br><br>Potential support through the new federal governmental system.<br><br>CADRE in the regular calendar of Nepal Red Cross Society (NRCS).<br><br>CADRE course curriculum and skills have been adapted in other community/volunteer responders' development courses | Nepali Army utilized the PEER SWR curriculum as reference for developing its internal SWR training for response teams. |
| Pakistan | Foundation courses for emergency responders of PES/Rescue 1122; and adopted in the regular training calendar of PES/Rescue1122.<br><br>Involvement of other emergency response organizations from the government such as Highway Police.<br><br>Rescue 1122 has been certified as a UN INSARAG Classified Team; PEER skills and system worked as the foundation in this process | Growing interest from the new leadership of National Health Emergency Preparedness and Response Network (NHEPRN).<br><br>Senior HOPE graduates/instructors advocate HOPE in emergency response preparedness efforts. | Potential support for institutionalization from the Government is seen.<br><br>CADRE course as a reference for other emergency response courses in PRC.<br><br>CADRE courses have been taken as the key for developing community responders in Pakistan.<br><br>CADRE courses are being conducted with other sources too. | |

### 5.1.1 Adaptation and Translation of PEER courses in the national context

One of the major activities of PEER Stage 2 was to ensure that all PEER courses were adapted to the national context. Some countries had already taken steps to adapt the courses during Stage 1, while others worked on this in Stage 2, and continued in Stage 3 and Stage 4. Adaptation was applied to the three core courses of PEER: Medical First Responder (MFR), Collapsed Structure Search and Rescue (CSSR), and the Hospital Disaster Preparedness Course (HOPE). Adaptation includes changes, revisions, and modifications that are needed in each course to tailor it to the national context.

All the PEER course packages are in English (standard version). After course packages are adapted, countries may want to translate the materials into their national or local dialects. PEER recommended that a small working group be convened to guide the translation process, as this could help promote agreement on the translation of keywords and concepts. This group can consist of those who are familiar with the course and have taken and/or taught it, along with "official" translators who are government-approved or who work in a full-time capacity and are trained. PEER, through its partial assistance program, helped provide funds to support course translation and related expenses.

MFR and CSSR course materials have been translated to Bengali (Bangladesh), Bahasa (Indonesia), Hindi (India), Nepali (Nepal), and Urdu (Pakistan). MFR and CSSR materials are readily available in these languages and English versions. The Philippines was more comfortable using the English version; hence translation was not necessary. Learning and improvement are a continuous process and NSET feels that there's more to be done in terms of adaptation, to review the totality of the materials assuring that the essence of these two core courses is maintained and assist countries to determine how these adapted materials will address and sustain training of instructors and end-users.

### 5.1.2 Community Integration of PEER programs

Besides institutionalization, PEER graduates are also adapting the PEER training for community outreach, community capacity building, and response readiness.

In the case of Pakistan, Rescue 1122/PES has expanded CADRE training to over 50,000 volunteers; they have initiated involvement in risk awareness and reduction campaigns in local villages of Pakistan.

In the case of India, NDRF members are conducting 15-day community training programs based on CADRE.

In the case of Nepal, The Armed Police Force and Police Force in Nepal have also started risk awareness campaigns and are working with local schools.

In the case of Bangladesh, The Fire Service and Civil Defense of Bangladesh (FSCD) has been working in grade schools regarding fire awareness. Also, FSCD responders who had previously taken PEER-based training, are themselves conducting similar training all over the country, especially for the companies in the garment sector. The FSCD has used PEER content to develop a 3-day urban disaster management program, to date able to develop more than 47,000 volunteers all over the country.

Similarly, in the Philippines, there have been plans on integrating CADRE into university courses. With one of the universities (University of San Carlos, Cebu) in Philippines has already made CADRE a part of its curriculum. CADRE-based courses have been previously used to prepare high school students for disaster response as well.

## ▪ BEMR, CSAR, DAT courses

In addition to the principal courses being conducted under the PEER program, NSET-Nepal also developed various forms of short-term training modules based on the PEER courses that are designed to help develop community-level responders.

### Basic Emergency Medical Response (BEMR)

The BEMR training course was developed with a focus on the preparation of emergency medical responders at the community, institution, and household levels. The graduates would be able to effectively respond to basic medical emergencies such as bleeding, burns, and fractures, and would help bridge the gap between health emergencies and proper medical treatment. The course is designed for a group of 24 individuals.

The BEMR training course module mainly includes:

- Perform the abdominal and chest thrust for a choking victim
- Perform the pre-hospital emergency care for a burn victim
- Perform the position to manage a shock victim
- Perform the process to stop the bleeding process and bandage the wound
- Perform the steps used to immobilize and treat a patient with broken extremities
- Perform Cardiopulmonary Resuscitation (CPR)

## Community Search and Rescue (CSAR)

The CSAR training course has been developed to enhance the capacity of community volunteers, organization staff, and schoolteachers/students for performing basic search and rescue operations. In that regard, the training module mainly focuses on techniques and methods for searching, locating, and extricating victims on the surface using the safest and the most appropriate procedure. Additionally, the CSAR training also incorporates the bucket brigade process of fire extinguishment which can be very effective at the community level. The course is designed for 8 hours focused on demonstration practice and exercises with 24 individuals; 4 groups with 6 members are placed in each group.

The CSAR training course module mainly includes:

- How to organize and start CSAR operation
- Create and operate a CSAR squad
- Safety precaution for CSAR operation
- Personal Protective Equipment and its necessity
- Performing basic SAR techniques
- Perform the task of lifting, moving, and stabilizing heavy objects
- Perform techniques of victim extrication
- Perform bucket brigade fire response operation

## Damage Assessment Training (DAT)

Severe damage to buildings might occur during an earthquake. Moreover, a series of damages can be brought on by aftershocks, therefore no one should enter the building without proper damage assessment either for rescue purposes or to dwell in. The DAT mainly focuses on those participants who are not from the engineering or construction background. It provides participants the knowledge and skill on how the building can be assessed and what are the major components of the building which may be dangerous if damaged. The training course is designed to accommodate 24 individuals.

## Community Preparedness and Response Training (CPRT)

2015 Gorkha Earthquake made us realize that community responders are a vital part of response during any kind of disaster as community people are the first to help themselves during disaster. CPRT a four-day package has been designed to make participants able to understand about an overall concept and basics of disaster risk management e.g., most common hazards, vulnerability and risk, and disaster risk

management mechanism in Nepal. It will continue with conducting, basic search and rescue techniques, pre-hospital basic emergency medical response techniques and basic skills that can be used for water rescue technologies. This program is designed in such a way that it has 20% of theoretical class with 80% practical based training where the participants will learn more practically.

### 5.1.3 Advanced Search and Rescue (ASAR) Course

There were suggestions for the inclusion of Advanced Search and Rescue (SAR) equipment like Victim Location Unit & Thermal Imaging Camera in the PEER CSSR course. This became one of the precursors for advanced SAR training for PEER graduates in India. In September 2008, the Government of India, USAID India, and NSET, in collaboration with Safety Solutions, Inc., organized the Advanced Search and Rescue (ASAR) Course for India. Twenty-four selected PEER master instructors from the four partnering institutions in India participated in the said course, conducted in Florida, USA. These recipients of the ASAR course are then expected to promote the same training and replicate their experience by organizing similar training programs in their respective institutions in India.

Participants performing hands-on exercises using pneumatic devices for collapsed structure incidents. ASAR Course, 2008.

MFR and CSSR courses were adapted by the Government of India as training program components of the National Disaster Response Force (NDRF). Eventually,

the PEER-trained instructors also serve as instructors for NDRF in its other training events like floodwater and deep-water rescue, Chemical, biological, radiological, nuclear (CBRN) emergencies, mountain rescue, management of dead bodies, and canine training.

## 5.2 Ongoing Efforts in Institutionalization

- Internalization of PEER system for instructors' and end-users' development
- Improvement of training facilities as per the PEER standard and system
- Acknowledgment of the need for more capacity building and expression of support by other donors for conducting PEER courses
- Efforts to include PEER courses as part of the national budget, with the Philippines already ahead in that regard
- Translation of PEER courses in local languages
- PEER course curricula adapted in regular emergency response courses by implementing agencies
- Conducting PEER courses with support from internal and foreign funding sources
- Present leaders who were PEER instructors or have become part of the PEER process understand the needs, how PEER helped in bridging the gaps and hence continue to promote program ownership and sustainability; and wherever appropriate, promote PEER concepts in policies
- PEER pioneers from different countries have shown keen interest in developing a permanent regional platform for sharing experiences and mutual assistance
- Unification of the PEER Database system with the collaboration of partner institutions, with support from the nodal agency and the implementing agency NSET.

# 6 LESSONS LEARNT, RECOMMENDATIONS AND WAY FORWARD

PEER has already developed an extensive history of more than 23 years as of the end of Stage 4 in 2021. Therefore, there is a huge lesson that has been learnt from this experience being involved in PEER. A Lessons Learnt Workshop was organized at the end of Stage 4 in September 2021 to address past concerns, highlight the lessons learnt from various perspectives, and provide potential recommendations for PEER to maintain its sustainability in the region.

## 6.1 Lessons Learnt

- There has been a realization that the number of emergency responders and instructors is still not adequate in most of the countries in the region. More PEER courses or something similar in nature is still a need in the region to increase the number of emergency responders in the event of a disaster.
- Corresponding to the requirement for a larger number of emergency responders, there has been a realization that the number of master trainers for developing more instructors is not adequate, and more master trainers need to be trained.
- PEER has highlighted a standard framework for national and organizational in disaster response system. However, different institutions have adopted the PEER guidelines in their training courses in ways which they are comfortable with, which signifies a lack of a distinct standard for these courses. A well-defined standard and an accreditation system for PEER courses can help other institutions to work more effectively by incorporating these PEER courses into their training regimen at different levels.
- The success of PEER programs has encouraged neighboring countries and training institutions to adopt the courses in different forms and become more involved in the PEER concept. This may be able to encourage more countries to set up emergency response capacity developing strategy.
- Enhanced coordination and collaboration of stakeholders at regional, national, sub-national, and even institutional levels must be promoted. As demonstrated through the example of the 2015 Gorkha Earthquake, an international collaboration of stakeholders can prove to alleviate the disaster losses to a larger degree.

- The communication and exchanges between stakeholders of different nations are not adequate. Sharing of expertise, resources, and knowledge among the stakeholders would create a coordinated effort for disaster response.
- The disaster response mechanism in the region has significantly improved with the introduction of the PEER program. With further integration and institutionalization of PEER courses at regional, national, and sub-national levels, the disaster mortality rate could be greatly mitigated in the future. Moreover, the number of people affected by the disaster could also be greatly lowered. This could, in turn, consequently, help in the reduction of the financial losses incurred as a result of the disaster albeit to a smaller extent.
- Courses like HOPE and CADRE encourage the concerned to prepare the critical facilities of hospitals and communities which has contributed to national as well as community resilience.
- There are disasters specific to certain regions, and disaster response courses for such disasters might not be applicable at a regional level. Further study and exploration of additional courses specific to certain communities, or regions is needed. CBRN Defense, Forest Fire Rescue, Advanced Remote and Mountain Rescue, and Response to Climate Change are some of the examples of additional courses.
- Increased awareness of disasters and disaster response at the national level was observed, however the response capacity at the subnational and community level is still greatly deficient compared to the regional and national level, and thus the focus should also be the capacity building of community responders.
- The typical length and intensity of the PEER courses might not be suitable for participants of all backgrounds. Depending upon the nature of the participants, a more flexible approach in course length, intensity and modality needs further exploration.

## 6.2 Recommendations

- It would be highly beneficial for all the stakeholders involved to explore the possibility of modularized courses. Participants would be able to change portions of the courses they wish to be proficient in. It would certainly help attract a new group of partner organizations and end-users. Meanwhile, the use of a modularized approach to courses would encourage community

outreach while also improving the knowledge retention capacity of the participants.

- The COVID-19 pandemic during Stage 4 of PEER showed the vulnerabilities of the current approach to conducting the courses. Many of the planned programs had to be postponed or even canceled. This has forced the stakeholders to consider further diversification of teaching modalities, such as the inclusion of online refresher courses, virtual teaching methodologies, remote exam proctoring, online discussion forums, as well as the inclusion of the courses in the national curriculum. For example, master instructors can observe the local instructors who provide lessons to the local participants and the observers provide remote feedback and guidance as necessary for course completion.
- Newer forms of regional collaboration need to be considered, that can be conducted virtually if need be. Joint tabletop meetings and exercises, joint simulation exercises and competitions to encourage learning, and conducting more post-disaster response "Lessons Learned" seminars must be encouraged.
- PEER should consider course accreditation for courses that have been later adapted or institutionalized in forms different than what is specified in PEER standards. An external evaluation and accreditation system that can validate the newer modified and adapted courses using globally recognized certification criteria could also help support national governments in response capacity building. Inclusion of different tiers/standards of depth, quality, or nature of participants in the form of accreditation tiers/standards could help stakeholders and interested parties track their progress in response capacity building.
- Development of new courses that address the changing climate, urbanization and population growth in the region is deemed as a necessity by most national stakeholders. Courses such as Advanced Forest Fire Rescue, CBRN Defense and Advanced Remote and Mountain Rescue must be integrated into the PEER program in the future.
- Improvement of bilateral and regional collaboration and coordination with development of bilateral and regional Memoranda of Understandings that highlight the request protocol, roles, responsibilities, and liabilities of the stakeholders of the agreement, establish a chain of command, cost reimbursement among stakeholders.
- There is a need for national investment for these courses to evolve and improve. There is a fair chance that, without further national interest and

investment, there is a loss of senior trainers due to relocation or retirement. Further research on knowledge and skill degradation needs to be conducted and optimal training protocols need to be set up.

## 6.3 Way forward

- There is a need for the review of the current form of courses and exploring of novel implementation methodologies based on varying context and situation. A prime example would be the possibility of conducting the PEER trainings in the scenario developed under the COVID-19 pandemic situation. Including courses that address the disasters because of changing climate, or even Chemical, Biological, Radiological, and Nuclear (CBRN) disaster situations should also be considered
- Continuation of the development of emergency responders and instructors and additional provision for refresher courses with added focus on the development of end-users.
- The Tools, Equipment, and Accessories (TEAs) necessary for the implementation of the courses needs to be reviewed and prepositioned at strategic locations of various countries in the PEER region. The availability of TEAs on demand can complement the skills and knowledge of the responders and instructors, and effectively prepare them for real-world emergency case scenarios. We may think of handier and more efficient TEAs that are useful for confined space SAR, especially for CSSR.
- In addition to continue of existing PEER courses, high-level Search and Rescue (e.g., Advanced SAR) courses need to be conducted for the development of expert responders that might be needed in case the situation demands skills and knowledge beyond the capacity of current PEER graduates. Moreover, it will help retain the PEER trainers for an extended period.
- Based on the impacts brought about by PEER in the region, there has been an interest for the continuation and expansion of PEER in South Asia beyond the current core four PEER affiliated countries of Bangladesh, India, Nepal, and Pakistan.
- Further promotion of regional networking, coordination, and cooperation among the PEER affiliated countries and agencies, and preparation of standby agreements among regional countries must be realized for efficient sharing and mobilization of available resources in case of emergencies.

### 6.3.1 Lessons Learned and Way Forward for PEER countries

## BANGLADESH

FSCD and BDRCS in Bangladesh has been a major part of PEER program in the past. PEER instructors and graduates from these organization has been involved in PEER as well as in developing local responders and sensitizing the people of Bangladesh about disaster management. PEER Graduates from Bangladesh were in action in some of the major building collapses of Spectrum Garments Factory, Phoenix Complex, Rangs Bhavan, and Rana Plaza. The details of the impacts of PEER in emergency response for disasters in Bangladesh are detailed in Chapter 4.2.

Bangladesh has incorporated the PEER courses modulus in basic and advanced emergency response courses with strict adherence to PEER standards. Similarly, Bangladesh has developed a large number (around 48,000 urban volunteers) of community-level volunteers as first responders, as well as community volunteers' instructors for developing additional volunteers.

#### Lessons Learned

The Government of Bangladesh has found the PEER programs to be highly valuable and effective in its local context and has shown sincere support to the PEER Program and has put disaster management in the highest priority. Similarly, with the support of the government, the implementing institutions in Bangladesh are greatly enabled to run PEER programs efficiently. Moreover, both the graduates and instructors of PEER have shown serious interest in enhancing the disaster response capacity of Bangladesh.

#### Way Forward

The Government of Bangladesh hopes continued engagements with nodal and implementing agencies in the future as well. With the constant change in the nature and frequency of disasters in the region owing to changing global climate and unforeseen circumstances, Bangladesh also realizes the need for advanced courses to meet the future challenges in disaster response and management. Furthermore, Bangladesh highly encourages proper networking and coordination among key actors and agencies in the South Asian region to better the disaster response capacity of the region as a whole. Bangladesh has also realized an additional need for courses related to climate change response and Chemical, Biological, Radiological and Nuclear (CBRN) defense.

# INDIA

National Disaster Response Force (NDRF) of India has been actively involved in disaster response and institutionalization of PEER courses since its establishment in 2006, especially in conducting the MFR, CSSR and CADRE courses through its own institutionalized versions of these courses. Similarly, the Indian Medical Association (IMA) has been involved in preparing the Hospitals for Emergencies through the HOPE program from PEER.

## Challenges faced by India

- Since a large volume of the medical services provided in the country is through private medical practitioners, there has been difficulty in convincing the private medical institutions to set aside their staff for participation in the 4 to 5-day HOPE course. There have also been concerns regarding the allocation of budget for organizing such programs.
- Not all medical facilities are well prepared to administer the HOPE courses correctly. There are numerous technical and administrative challenges that hinder the efficient running of such systems.
- NDRF is a force of deputations and personnel from various Central Armed Police Forces (CAPFs) for disaster response operations. They must return to their respective CAPFs once their 7-year term is over. This requires additional training at constant intervals for new deputations, however, this also means that the number of disaster response experts is increasing rapidly even after their repatriation in their respective CAPFs, and these trained personnel are also being utilized for disaster response in case of disasters.

## Way Forward for India

The HOPE graduates and instructors in India have formed an Association of Disaster Management & Public Health (ADMPH), and they are very much eager to move ahead with the institutionalization of HOPE and organize more HOPE courses in the future. The COVID-19 pandemic situation proved as a giant hindrance for ADMPH to help support HOPE programs during the time. However, there have been plans to set up additional HOPE programs as part of the institutionalization of HOPE in India. Moreover, there have also been plans for setting up an Emergency Operations Command Center (EOC), with the infrastructure almost in place. There is an ongoing search for supportive sponsors, such that a model EOC can be prepared.

There are plans to train around 1-2% of medical professionals in HOPE, and additional plans to include Medical First Responders' (MFR) and Community Action for Disaster Response (CADRE) programs for medical professionals soon.

Concerning NDRF, NDRF feels that there is a need for an increase in the number of PEER courses, including refresher courses, to maintain and increase the efficacy of the disaster response teams. Similarly, NDRF has also realized the need for customized courses designed to train a large number of NDRF personnel in a single go. Additionally, NDRF felt the need for additional courses that cover disaster response case scenarios that are much more specific such as mountain rescue, CBRN disaster response, or even disaster response in cases of pandemics like COVID-19. The courses also need to address concerns related to climate change.

## NEPAL

The impact of PEER has been substantial in preparing Nepal for emergency disaster response efforts. PEER trained national responders were in the frontline during the 2015 Gorkha Earthquake in Nepal. Moreover, PEER has helped Nepal in giving shape to the national emergency response system and training strategy by contributing to the development of policies and guidelines, institutionalization of MFR, CSSR end-user courses, improvement in training standards, establishment of Disaster Management Division/ Sections in the security forces of Nepal, and as well as the internalization of PEER curricula in regular Emergency Response Courses. The security forces are retaining the required number of PEER graduates in those specialized units for the institutionalization process and quality services for DRR. Moreover, the Red Cross Society of Nepal has been contributing very well to the field of DRR utilizing the PEER graduates in developing and mobilizing the volunteers.

### Challenges

- There are not enough programs being conducted in relation to the high amount of demand for PEER courses. Nepali Army, Nepal Police and Armed Police Force of Nepal have all requested additional series of instructors' development courses on MFR, CSSR, and SWR courses.
- PEER partner institutions in Nepal have also felt that their input and feedback towards the Partial Funding Assistance Program (PFAP) needs more encouragement to conduct more courses.
- The onset of the COVID-19 pandemic has highlighted some major concerns in the implementation of PEER programs, with many physical face-to-face trainings being postponed or canceled.

- High demand of CADRE and HOPE is present, and exploration of the roles of NRCS, Local government in this changing context must be considered regarding delivering these courses to the communities.

## Way Forward for Nepal

To address the issues brought forth by the COVID-19 pandemic, the need for the development of additional online courses has been realized based on the experiences from the delivery of past online refresher courses. There also needs to be a further exploration into the organization of national-level courses for Nepal, and a continuous assessment of the country-specific needs to be performed as per the new administrative structure of the government (the Federal Democratic Republic in the case of Nepal). It has been realized that a new and robust intervention like the PEER program should be introduced to capacitate the provincial government in the field of DRR. The Disaster Risk Reduction and Management Act of Nepal shouts that the provincial governments should be more effective in dealing with the DRR but in reality, they are the least prepared as of now.

The engagement of private institutions and civil society for emergency response activities must be encouraged for more effective disaster response. Prepositioning of emergency response equipment in strategic locations of different levels is necessary for faster and more effective mobilization of resources.

Nepal also hopes to accelerate the development of emergency response volunteers and increased networking among disaster response teams, and affiliated stakeholders and agencies.

## Lessons Learned

- The skilled disaster rescue professionals in the case of Nepal are dispersed across different security forces, therefore there is a need to keep all the trained professionals under one single national disaster response institution for effective response and mobilization. A roster of PEER graduates should be developed/maintained by their organizations so that it becomes asset during an emergency.
- More skill-based knowledge development processes need to be incorporated in the courses, rather than a heavy reliance on knowledge alone.
- The success of disaster response operations is highly dependent on the state, the knowledge, and skills of the rescuers, and the efficiency of the available equipment.

- The knowledge and skills of retired professionals shouldn't be allowed to go to waste therefore means to utilize their skills and knowledge and transfer them to new generations of disaster responders must be developed.
- HOPE courses are very effective even when delivered online, owing to the high level of standards being maintained. Huge positive feedback was received even on online HOPE courses and HOPE Refresher Courses. HOPE has also been modified for training end-users in the form of Mass Casualty Incident Programs.

## PAKISTAN

The National Disaster Management Authority of Pakistan (NDMA) acts as the national focal agency for organizations like Rescue 1122, Pakistan Red Crescent Society (PRCS), and National Health Emergency Preparedness and Response Network (NHEPRN) have been actively involved as implementing partners/institutions in Pakistan.

### Challenges

A lot of scheduled programs in Pakistan had to be canceled because of the COVID-19 pandemic situation. However, efforts were made to organize the courses online. There have also been issues related to the availability of funding, especially during the pandemic situation owing to the heightened focus of the community on tackling the pandemic itself – funding for various events had to be postponed time and again due to international humanitarian commitments.

### Way Forward

The institutionalization of the PEER programs will be the major focus moving forward with PEER in Pakistan. Pakistan has already established National Working Groups for initializing the full-scale institutionalization of PEER programs in Pakistan.

Rescue 1122 Academy of Lahore and PRCS have fully integrated PEER into their own curricula/training programs. Similarly, NHEPRN has already finalized the curricula and has been working on the institutionalization of HOPE in Pakistan. The major goal for Pakistan to move forward is to ensure national institutionalization to fulfill the motto of "Disaster Resilient Pakistan".

# 7 PEER Stage 4 in Program Extended Countries and PEER Stage 5

## 7.1 PEER Stage 4 in Program Extended Countries

### 7.1.1 Bhutan

In PEER stage 4, Bhutan was considered as one of the programs' extended countries along with Afghanistan, Maldives, and Sri Lanka. Hence, an exploration visit for PEER implementation was conducted in Bhutan in 2017 by NSET and USAID/BHA representatives. The team had separate meetings with different ministries and departments, such as the Ministry of Home and Cultural Affairs (MOCHA), and the Department of Disaster Management Ministry of Health. The DRM stakeholders were positive to implement the program. Later, in 2017 and 2018, Bhutan was invited for Regional Swift Water Rescue (SWR) course development workshop, and they also participated in the pilot course. Bhutan took part in the regional MFR and CSSR courses as well. The course participants appreciated the courses and started seeking opportunities for conducting the courses in Bhutan.

### 7.1.2 Afghanistan

In PEER stage 4, Afghanistan was considered as one of the programs extended countries along with Bhutan, Maldives, and Sri Lanka. The PEER team maintained regular communication and coordination with the focal agency, Afghanistan National Disaster Management Authority (ANDMA). Due to some technical problems, it was not possible to visit and conduct any dedicated course events in Afghanistan. As the DRM stakeholders were positive to implement the PEER program, it was possible to invite the participants for regional SWR and MFR courses conducted in Nepal in 2018. The course participants and ANDMA appreciated the courses and sought opportunities for conducting the courses in their country.

### 7.1.3 Sri Lanka

NSET performed an exploratory visit to Sri Lanka in 2019 to see the possibility of partnership for a range of PEER courses. Total five people from Sri Lanka also attended the regional Medical First Response (MFR) and Collapsed Structure Search and Rescue (CSSR) courses from June 12 to July 5, 2019: two members of the Sri

Lankan army, one of the Sri Lankan police, one of the Sri Lankan air forces, and one of the Sri Lankan Navy.

These courses were newly introduced to Sri Lanka; however, Sri Lanka was not new to the PEER courses as the Asian Disaster Preparedness Center (ADPC) has been conducting The Hospital Preparedness for Emergency (HOPE) training there.

Sri Lanka extended their appreciation for the opportunity to be involved in the PEER program. Sri Lanka is preparing for conducting training, and accreditation of the courses. They are currently progressing with the program activities. As of now, Sri Lanka has already adapted the course in its local language and will be validated soon.

### 7.1.4 Maldives

Medical doctors, Emergency Medical Technicians, Corporals, and Warrant officers from the Maldives National Defense Force were among the five Maldivians who attended the regional Medical First Response (MFR) (12-24 June 2019) and Collapsed Structure Search and Rescue (CSSR) (28 June-5 July 2019) courses. They found the courses to be extremely beneficial and they were convinced of the training content and expressed that it was very relevant to individuals from both the medical area and the National Defense Force.

## 7.2 PEER Stage 5

The Asian Disaster Preparedness Center (ADPC) has taken the initiative for the promotion of institutionalization of PEER, enhancement of the capacity of national institutions to scale-out PEER interventions and promote regional networking in the South Asian region through PEER South Asia (Stage 5). However, as Stage 5 is still ongoing, it may be too early to discuss the achievements and impact of this stage. As the name suggests, the major focus of this stage is on the South Asian countries of Afghanistan, Bangladesh, India, Nepal, Pakistan, Sri Lanka with the engagement of Bhutan and Maldives for regional activities.

### 7.2.1 The PEER Stage 5 FRAMEWORK

The PEER Stage 5 framework consists of three pillars with specific interventions for integration into existing regional and national strategies of PEER countries, and the corresponding activities are designed to encourage sustainability and leverage support from other partners and programs.


Figure 14: PEER Stage 5 Focus Countries

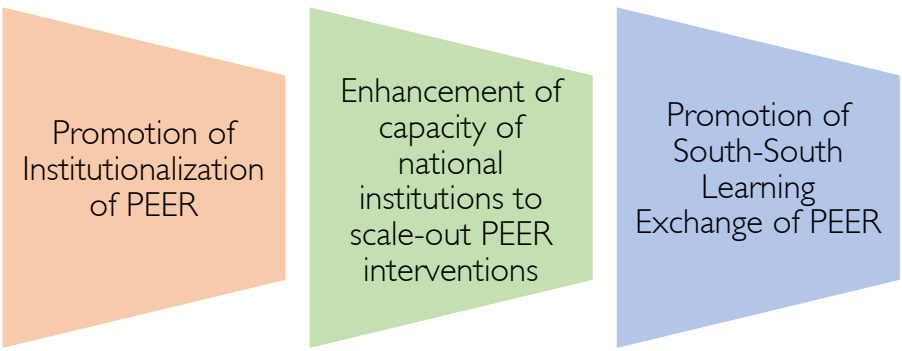



Figure 15: PEER Stage 5 Framework

### 7.2.2 Implementation Strategy

Partnerships with the National Disaster Management Organizations (NDMOs) as nodal agencies remain the foundation for integrating PEER into existing Disaster Risk Management (DRM) policies, strategies, and program frameworks.

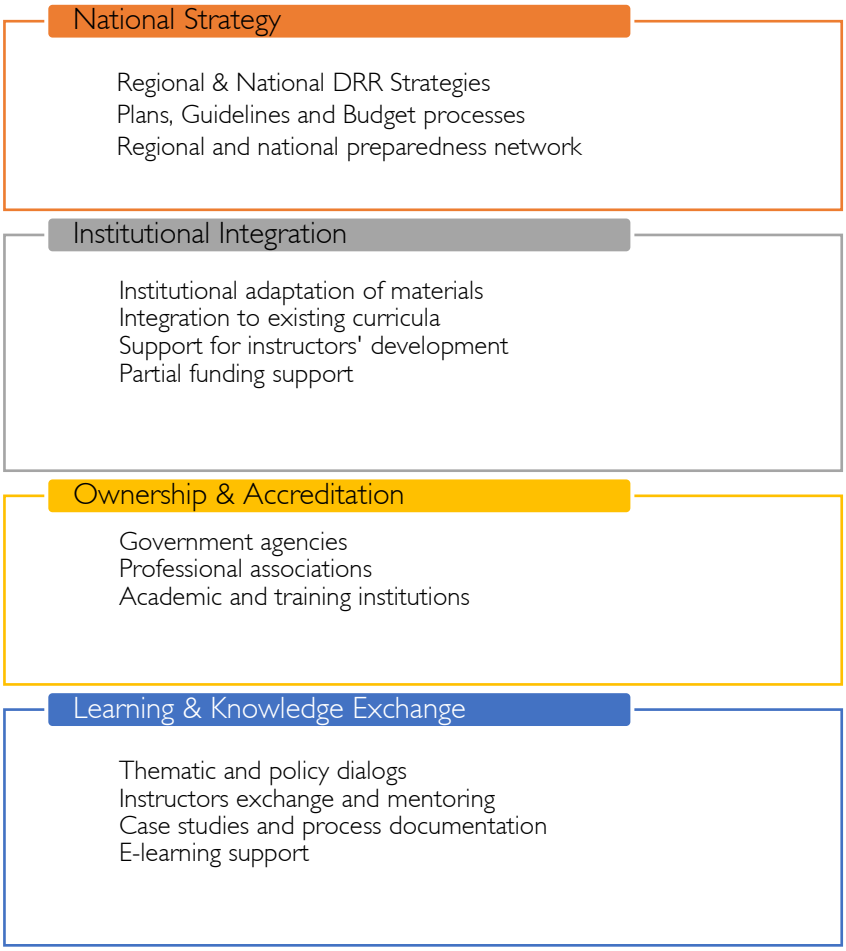



Figure 16: PEER South Asia Implementation Strategy

Participants learning the skill of CPR to be given to an infant during MFR.

# ANNEXES

## Annex 1: Overview of Courses

### Medical First Responder (MFR)

- **Purpose:**

The purpose of this course is to provide individuals with first response tasks the knowledge and skills necessary to assess, treat and transport sick or injured patients because of an emergency or disaster.

- **Background:**

MFR is a thirteen-day course of the Program for Enhancement of Emergency Response that was developed by the United States Agency for International Development through its Office of U.S. Foreign Disaster Assistance together in collaboration with the Miami-Dade Fire Rescue Department, Asian Disaster Preparedness Center, and National Society for Earthquake Technology-Nepal. The course has been delivered in Bangladesh, India, Indonesia, Nepal, Pakistan, and Philippines.

- **Target Audience:**

Emergency and disaster first response groups, i.e., Fire Departments, Red Cross/Red Crescent Societies, Army Departments, Police Departments, Rescue Groups associated with the government emergency response system.

- **Course Methodology and Content:**

PEER MFR Course is a pass/fail course. The course is delivered in thirteen days led by a course coordinator, seven lead instructors with four assistant instructors using the interactive lecture method (ILM) of instruction that is objective based, performance oriented, tested, and highly participatory. The experience of the instructors is enriched by the interaction between the participants. Experienced course monitor is assigned for overall supervision of course delivery.

Interactive lectures and demonstration practice sessions are used to present the course content with exercises and written evaluations used to assess participant learning.

- ## MFR Course lessons highlight on:
  - Emergency Medical Systems and the Medical First Responder
  - Infectious Disease and Precautions
  - The Incident
  - Anatomical References
  - Patient Assessment
  - Basic Life Support and Cardiopulmonary Resuscitation
  - Oxygen Therapy
  - Hemorrhage and Shock
  - Soft-Tissue Injuries
  - Musculoskeletal Injuries
  - Skull, Spinal and Chest Injuries
  - Burns and Environmental Emergencies
  - Poisoning
  - Medical Emergencies, Part 1: Cardiovascular Emergencies and Abdominal Distress
  - Medical Emergencies, Part 2: Respiratory Emergencies
  - Medical Emergencies, Part 3: Seizures, Diabetic Emergencies, and Cerebrovascular Accidents
  - Childbirth
  - Lifting and Moving Patients
  - Report Writing and Preparation for the Next Call
  - Multiple Casualty Incidents and Triage
- ## Performance Objective:

Given three typical emergency scenarios, i.e., trauma, medical and childbirth emergencies, the individual participant, following the protocols taught in the course, will:

- Receive and register an emergency
- Arrive at a simulated emergency event and evaluate the scene
- Secure the scene and solicit appropriate help
- Gain access to and evaluate the status of the patient.
- Select the necessary equipment

- Stabilize the patient at the scene
- Immobilize and transport the patient
- Inform the receiving facility of the patient's condition and treatment given
- Prepare the equipment for the next emergency

Participants will be grouped into 6 persons per group and will be provided the basic equipment used in medical first response. Participants will use personal protective equipment and adhere to all universal precautions. Each scenario will be completed in approximately fifteen minutes.

## Instructional Objectives

After this course, the participants will be able to:

- List the steps for preparing the medical first responder's equipment.
- Describe the method of receiving and registering a request for assistance, reporting on the situation, and requesting resources.
- List the actions to secure the scene of the incident and to gain access to the victims.
- Describe patient assessment and select the right equipment to provide care.
- Describe the procedures in stabilizing a patient, mobilization, and care during transport.
- Complete a report on a patient's condition and the treatment given.
- Prepare the equipment to respond to a new emergency.

## Lesson Summaries

### Lesson 1 Course Introduction

General information and administrative details of the course.

### Lesson 2 The Emergency Medical Services System and the Medical First Responder

Components of the EMS system, pre-hospital treatment; duties of the MFR, qualities of the MFR, legal issues.

### Lesson 3 The Incident

Incident, request for assistance, responding to the scene, types of incidents, scene assessment, scene safety, gaining access, personal protection equipment, medical equipment.

### Lesson 4 Anatomical References

Anatomical position, reference points, divisions, cavities, systems.

### Lesson 5 Infectious Disease and Precautions

Modes of transmission, signs and symptoms, pre-hospital treatment, universal precautions.

### Lesson 6 Patient Assessment

General procedures in initial assessment and physical examination.

### Lesson 7 Basic Life Support and Cardiopulmonary Resuscitation (BLS and CPR)

Anatomy of the respiratory system; cyanosis; techniques for opening the airway; rescue breathing; obstructed airway; steps for clearing an open airway; anatomy of the circulatory system; steps for CPR; complications of inadequate CPR; initiating and terminating CPR.

### Lesson 8 Oxygen Therapy

Indications, equipment and accessories, CPR mask, bag-valve mask, oxygen equipment, procedures.

### Lesson 9 Hemorrhage and Shock

Review of the circulatory system, pulse locations, blood and blood volume, perfusion, shock, pre-hospital treatment, anaphylactic shock, internal and external hemorrhage.

### Lesson 10 Soft-Tissue Injuries

Dressings and bandages, open and closed injuries, types, pre-hospital treatment.

### Lesson 11 Musculoskeletal Injuries

Skeletal system, fractures, sprains and strains, reasons for immobilizing, pre-hospital treatment, manual traction, techniques for immobilization.

### Lesson 12 Injuries to the Skull, Spinal Column and Chest

Specific injuries, pre-hospital treatment.

### Lesson 13 Burns and Environmental Emergencies

Burns, causes, classification, signs and symptoms, pre-hospital treatment, exposure to the elements; Cold weather injuries.

### Lesson 14 Poisoning

Ingested poisons, absorbed poisons, injected poisons, alcohol abuse, drug abuse, pre-hospital treatment.

### Lesson 15 Medical Emergencies, Part 1: Cardiovascular Emergencies and Abdominal Distress

Myocardial infarction, angina pectoris, congestive heart failure, abdominal distress; signs and symptoms and pre-hospital treatment.

### Lesson 16 Medical Emergencies, Part 2: Respiratory Emergencies

Common causes of respiratory problems, smoke inhalation, pre-hospital treatment.

### Lesson 17 Medical Emergencies, Part 3: Seizures, Diabetic Emergencies and Cerebral Vascular Accidents (CVA)

Signs and symptoms, pre-hospital treatment.

### Lesson 18 Childbirth Emergencies

Anatomy, stages of childbirth, assessment of the mother, prehospital treatment of the mother and newborn, complications.

### Lesson 19 Lifting and Moving Patients

Methods for correct lifting, correct posture, handling neck and spinal injuries.

### Lesson 20 Report Writing and Preparation for the Next Call

Report format, equipment decontamination, personal decontamination.

### Lesson 21 Multiple Casualty Incidents and Triage

Color coding, review of diagnostic signs.

### Lesson 22 Course Review

Questions from participants. Review of issues recorded in the "File."

### Lesson 23 Final Practical Evaluation

Three stations: Trauma, Medical, and Childbirth.

## Sample MFR Course Schedule

| Day 1 | Day 2 |
|---|---|
| 09:00 - **Registration**<br>09:30 - **Lesson 1:** Course Introduction<br>11:00 - **Opening Ceremony**<br>12:00 - Course Pre-test<br>13:00 - Lunch Break<br>14 :00 - **Lesson 2:** The Emergency Medical Services (EMS) System and MFR<br>15:30 - Tea Break<br>15:45 - **Lesson 3:** Infectious Diseases<br>17:15 - Daily Course Evaluation | 09:00 - Morning Roll Call, Post-Test 2, 3<br>09:15 - **Lesson 4:** The Incident<br>11:00 - Tea Break<br>11: 15 - **Lesson 5:** Anatomical References<br>12: 45 - Lunch<br>13: 45 - **Lesson 6:** Patient Assessment<br>14: 45 - Tea Break<br>15:00 - **Lesson 6:** Patient Assessment (cont.)<br>16:15 - Daily Course Evaluation |
| **Day 3**<br>09:00 - Morning Roll Call<br>09:15 - **1st Interim Test**, Post-Test 4, 5<br>10:15 - **Lesson 6:** Practical Stations<br>11:45 - Tea Break<br>12:00 - **Lesson 6:** Practical Stations (cont.)<br>13:30 - Lunch<br>14:30 - **Lesson 7:** BLS and CPR/**Part 1: FBAO**<br>16:30 - Tea Break<br>16:45 - **Lesson 7:** Practical Stations<br>18:15 - Daily Course Evaluation | **Day 4**<br>09:00 - Morning Roll Call, Post-Test 6<br>09:15 - **Lesson 7: Part 2 - CPR**<br>10:15 - Break<br>10:30 - **Lesson 7: CPR** (cont.)<br>11:30 - Video<br>12:30 - Lunch<br>13:30 - **Lesson 7:** Practical Stations (cont.)<br>15:00 - Tea Break<br>15:15 - Lesson 7: Practical Stations (cont.)<br>16:30 - Daily Course Evaluation |
| **Day 5**<br>09:00 - Morning Roll Call<br>09:15 - **Lesson 7:** Practical Stations (cont)<br>10:45 - Tea Break<br>11:00 - **Lesson 8:** Oxygen Therapy<br>12:30 - Prayer and Lunch<br>14:30 - **Lesson 8:** Practical Stations<br>16:30 - Tea Break<br>16:45 - Daily Course Evaluation | **Day 6**<br>09:00 - Morning Roll Call<br>09:15 - 2nd Interim Test, Post-Test 7<br>10:15 - Break<br>10:30 - Lesson 9: Hemorrhage and Shock<br>11:45 - Lesson 10: Soft Tissue Injuries<br>13:00 - Lunch<br>14:00 - Lesson 10: Practical Stations<br>15:30 - Tea Break<br>15: 45 - Lesson 10: Practical Stations (cont.)<br>17:15 - Daily Course Evaluation |

| Day 7 | Day 8 |
|---|---|
| 09:00 - Morning Roll Call, Post-Test 8, 9, 10<br>09:15 - **Lesson 11:** Musculoskeletal Injuries<br>10:45 - Tea Break<br>11:00 - **Lesson 11:** Practical Stations<br>12:30 - **Lesson 11:** Practical Stations (cont.)<br>14:00 - Lunch<br>15:00 - **Lesson 12:** Skull, Spinal and Chest Injuries*<br>16:15 - Tea Break<br>16:30 - **Lesson 12:** Practical Stations<br>17:15 - Daily Course Evaluation | 09:00 - Morning Roll Call<br>09:15 - **3rd Interim Test**, Post-Test 11<br>10:15 - **Lesson 12:** Practical Stations (cont.)<br>11:00 - Tea Break<br>11:15 - **Lesson 12:** Practical Stations (cont.)<br>12.00 - **Lesson 12:** Practical Stations (cont.)<br>12:45 - **Lesson 13:** Burns and Environmental Emergencies<br>13:45 - **Lunch**<br>14:30 - **Lesson 13:** Burns and Environmental Emergencies (cont.)<br>15:30 - **Lesson14:** Poisoning<br>16:45 - Tea Break<br>17:00 - **Lesson 15:** Medical Emergencies I<br>18:30 - Daily Course Evaluation |
| **Day 9** | **Day 10** |
| 09:00 - Morning Roll Call<br>09:15 - **4th Interim Test**, Post-Test 12, 13, 14, 15<br>10:15 - **First Group Presentation**<br>11:15 - Tea Break<br>11:30 - First Group Presentation Evaluation<br>12:30 - **Lesson 16:** Medical Emergencies II<br>14:00 - **Lunch**<br>15:00 - **Lesson 17:** Medical Emergencies III<br>16:15 - Tea Break<br>16:30 - **Lesson 17:** Medical Emergencies III (cont.)<br>17:30 - Daily Course Evaluation | 08:30 - Morning Roll Call<br>08:45 - **5th Interim Test,** Post-Test 16, 17<br>09:45 - **Lesson 18:** Childbirth Emergencies<br>10:45 - Break<br>11:00 - **Lesson 18:** Childbirth Emergencies (cont.)<br>12:15 - **Lesson 18:** Practical Stations<br>13:45 - Lunch<br>14:45 - **Lesson 18:** Practical Stations (cont.)<br>16:15 - Break<br>16:30 - **Lesson 19:** Lifting and Moving Patients<br>17:30 - **Lesson 19:** (Practical Stations)<br>18:45 - Daily Course Evaluation |

| Day 11 | Day 12 |
|---|---|
| 08:30 - Morning Roll Call, Post-Test 18, 19 | 08:30 - Morning Roll Call |
| 08:45 - **Lesson 19:** (Practical Stations) (Cont.) | 08:45 - **6th Interim Test**, Post-Test 20, 21 |
| 10:15 - Tea Break | 10:00 - **Second Group Presentation** |
| 10:30 - **Group Exercise** | 11:00 -Tea Break |
| 12:00 - Lunch | 11:15 - Second Group Presentation Evaluation |
| 13:00 - **Lesson 20**: Report Writing and Preparation for the Next Call | 12:15 - Prayer and Lunch |
| 14:15 - Lesson **21**: Triage | 14:15 - **Lesson 22**: Course Review |
| 15:15 - Tea Break | 16:00 - Tea Break |
| 15:30 - **Lesson 21**: Practical Stations | 16:15 - Course Post Test |
| 16:30 - Daily Course Evaluation | 17:15 - Daily Course Evaluation |

**Day 13**

08:00 - Morning Roll Call

08:15 - **Lesson 23**: Final Practical Evaluation

13:00 - Lunch

14:00 - **Course Evaluation**. Post-Test, Review of Expectations, General Course Discussion, and Final Results

16:00 - **Closing Ceremony**

* Course Coordinator may need to modify this as required and as necessary*

# Collapsed Structure Search and Rescue (CSSR)

## Purpose:

The purpose of this course is to provide individuals with collapsed structure search and rescue tasks the knowledge and skills necessary to search for, stabilize and extricate victims trapped in collapsed structures using the safest and most appropriate procedures.

## Background:

CSSR is an eight-day course of the Program for Enhancement of Emergency Response that was developed by the United States Agency for International Development through Office of U.S. Foreign Disaster Assistance (USAID/OFDA) together in collaboration with the Miami-Dade Fire Rescue Department, Asian Disaster Preparedness Center (ADPC), and National Society for Earthquake Technology Nepal (NSET). The course has been delivered in Bangladesh, India, Indonesia, Nepal, Pakistan, and the Philippines. *CSSR Course Pakistan Adapted Version is a 9-day course.*

## Target Audience:

Emergency and disaster first response groups, i.e., Fire Departments, Red Cross/Red Crescent Societies, Army Department, Police Departments, and Rescue Groups associated with the government emergency response system.

## Course Methodology and Content:

PEER CSSR Course is a pass/fail course. The CSSR course is delivered by a course coordinator, seven lead instructors with the help of four assistant instructors using the Interactive Lecture Method (ILM) of instruction that is objective based, performance oriented, tested, and highly participatory. The experience of the instructors is enriched by the interaction between the participants. Experienced course monitor is assigned for overall supervision of course delivery.

A practice session is scheduled the day before the classes begin for instructors to review the use, maintenance and safety precautions for all equipment used in the course. Interactive lectures and demonstration practice sessions are used to present the course content with exercises and written evaluations used to assess participant learning.

CSSR Course lessons highlight on:

- Planning
- Rescue Scene Organization Search
- Basic Medical Care
- Emergency Building Shores
- Breaching and Breaking
- Lifting Heavy Objects
- Final Drill- Structural Collapse Scenario

## Performance Objective:

Given a simulated collapsed structure and a collapsed structure equipment kit, participants working in teams of 5 to 6 will search for, locate, stabilize, and extricate two victims of a simulated collapse in no more than 4 hours.

## Instructional Objective:

At the completion of this course, the participants will be able to:

- Describe the organization and procedures required for initiating a collapsed structure rescue operation.
- Describe and explain the classification procedures and marking system for collapsed structures.
- List the security standards that must be followed in a collapse structure operation.
- Name, describe and explain the use and maintenance procedures of the tools, equipment and accessories used in a collapsed structure operation.
- Describe and explain the different methods for locating voids and the steps to follow in locating possible victims.
- Name and explain the basic techniques for penetrating into a collapsed structure and reaching a victim.
- Describe the medical protocol to follow in rendering assistance to one or more victims trapped in a collapsed structure.

## CSSR Lesson Summaries

### Lesson 1: Introduction

Introduction of personnel. Expectations. Materials to be utilized in the course. Inspection of personal protective equipment. Purpose of the course. Performance objectives. Training objectives. Evaluation system. Course schedule. Evaluation forms. Registration forms. Liability Release. Ground rules. Emergency procedures. File.

### Lesson 2: Organizing and Starting a CSSR Operation

Definition of collapsed structure search and rescue (CSSR). Definition of confined space rescue. Definition of a CSSR Team. Overview of the Incident Command System. Area of Operations. Phases of a CSSR Team mission. Stages during the operations phase of a CSSR incident. Steps for initial assessment. Basic organization of a CSSR Team.

### Lesson 3: Structures, Materials and Damage Types

Construction materials. Classification according to composition and use. Forces affecting building materials. Construction methods. Structure types. Characteristics of structures. Types of damage and failures. Collapse patterns.

### Lesson 4: Structural Triage and the INSARAG Marking System

Structural triage. Triage factors and criteria. INSARAG Marking System (International Search and Rescue Advisory Group)

### Lesson 5: Operational Safety

Factors affecting safety. Operational guidelines. Unsafe actions and conditions. Safety rules. Safety considerations for each phase of a CSSR mission.

### Lesson 6: Search and Location Techniques

Definition of void space. Locating void spaces. Types of structures. Collapse patterns. Stages for search and location: reconnaissance, gain access, location. Conventional search techniques. Unconventional search techniques.

### Lesson 7: Tools, Equipment and Accessories

Definitions of tools, equipment, and accessories. Classification according to use. Classification according to its operation. Steps to follow before, during and after using tools. Use of a chipping hammer. Use of an impact drill. Use of saws.

### Lesson 8: Rescue Strategies and Techniques

Vertical and horizontal approach. Advantages and disadvantages. Rescue techniques. Steps for assessment of access areas. Techniques for breaking and breaching.

### Lesson 9: Shoring Techniques

Definition of shoring. Types of shoring. Conditions for shoring. Procedures for building shores.

### Lesson 10: Lifting and Stabilizing Loads

Lifting techniques. Use of hydraulic jack. Cribbing.

### Lesson 11: Pre-Hospital Treatment

Mechanisms of injury. Potential injuries. Crush syndrome. Compartment syndrome. Immobilization.

### Lesson 12: Course Review

Review of CSSR Course lessons and answer clarifications, if any.

### Lesson 13: Final Practical Exercise

Three scenarios:

- Organizing and Starting a CSSR Operation
- Searching for and Locating Victims
- Gaining access to a victim, providing pre-hospital treatment, and extricating the victim.

## Sample CSSR Course Schedule

| Day 1 | Day 2 |
|---|---|
| 07:30 – Registration<br>08:00 – Lesson 1: Course Introduction<br>09:30 – Course Pre-test<br>10:30 – Opening Ceremony<br>11:30 – Lesson 2: Organizing and Starting a CSSR Operation<br>12:30 – Lunch<br>14:30 – Lesson 2: Organizing and Starting a CSSR Operation (cont.)<br>15:30 – Break<br>15:45 – Lesson 3: Construction Materials, Structures and Damage Types<br>17:15 – Daily Course Evaluation | 08:00 – Morning Roll Call, Post-test Review Lessons 2 and 3<br>08:15 – Lesson 4: Worksite Triage and the INSARAG Building Marking System<br>09:30 – Lesson 5: Operational Safety<br>10:30 – Break<br>10:45 – Lesson 5: Operational Safety (cont.)<br>11:45 – Lunch<br>13:00 – Lesson 6: Search and Location Techniques (lecture)<br>15:00 – Break, Prayer Time<br>15:30 – Daily Course Evaluation |
| **Day 3** | **Day 4** |
| 08:00 – Post-Test Review: Lessons 4& 5<br>08:15 – Safety Briefing<br>08:30 – Lesson 6: Search and Location Techniques (demonstration)<br>09:00 – Lesson 6: Search and Location Techniques (practice and evaluation)<br>10:00 – Break<br>10:15 – Lesson 6: Search and Location Techniques (practice and evaluation)<br>11:15 – Lunch<br>13:00 – Lesson 7: Tools, Equipment and Accessories (Lecture)<br>14:45 – Daily Course Evaluation<br>15:00 – Break | 07:30 – Post-Test Review: Lesson 6<br>07:45 – Lesson 7 (cont'd.) Practice & Evaluation<br>09:30 – Break<br>10:00 – Lesson 7 (cont'd.) Practice & Evaluation<br>11:45 – Lunch<br>12:45 – Lesson 7 (cont'd.) Practice & Evaluation<br>14:30 – Break<br>15:00 – Lesson 7 (cont'd.) Practice & Evaluation<br>16:45 – Tools Rehab<br>17:15 – Daily Course Evaluation |
| **Day 5** | **Day 6** |
| 07:30 – Post-Test Review: Lesson 7<br>07:45 – Lesson 8: Rescue Strategies and Techniques<br>09:45 – Break<br>10:00 – Lesson 8 Practice & Evaluation: Breaking and Breaching Techniques<br>12:30 – Lunch<br>14:00 – Lesson 8 Practice & Evaluation: Breaking and Breaching Techniques<br>16:30 – Break<br>17:00 – Tools Rehab<br>17:30 – Daily Course Evaluation | 07:30 – Post-Test Review: Lesson 8<br>07:45 – Lesson 9: Shoring Methods<br>09:45 – Break<br>10:00 – Lesson 9: Demonstration<br>10:30 – Lesson 9 (cont'd.) Practice & Evaluation<br>13:00 – Lunch<br>14:00 – Lesson 9 (cont'd.) Practice & Evaluation<br>16:30 – Break<br>17:00 – Tool Rehab<br>17:30 – Daily Course Evaluation |

| Day 7 | Day 8 |
|---|---|
| 07:30 – Post-Test Review: Lesson 9<br>08:00 – Lesson 10: Lifting and Stabilizing Loads<br>09:00 – Lesson 10 (cont'd.) Demonstration<br>10:00 – Break<br>10:30 – Lesson 10 (cont'd.) Practice & Evaluation<br>11:30 – Lunch<br>13:00 – Lesson 10 (cont'd.) Practice & Evaluation<br>14:00 – Tools Rehab<br>14:30 – Break<br>15:00 – Lesson 11: Pre-Hospital Treatment<br>17:00 – Daily Course Evaluation | 08:00 – Post-Test Review: Lesson 10<br>08:15 – Safety Briefing Break<br>08:30 – Lesson 11 Practical<br>09:30 – Break<br>10:00 – Lesson 12: Course Review<br>11:00 – General Course Post-Test<br>12:00 – Daily Course Evaluation<br>12:15 – Lunch & Prayer Break<br>13:15 – Instructors Prepare for Final Practical Exercise |
| **Day 9** | |
| 00:00 – Lesson 13: FINAL PRACTICAL EXERCISE Preparation, Notification, and Instructions<br>06:00 – Post-Test Review: Lesson 11<br>06:15 – Phase 1<br>07:00 – Phase 2<br>07:45 – Phase 3<br>12:30 – Working Lunch (continue exercise)<br>14:00 – Phase 3 (cont'd.)<br>15:00 – End Final Practical, Tool Rehab<br>16:15 – Final Course Evaluation, Course Results<br>17:00 – Closing Ceremony | |
| * Course Coordinator may need to modify this as required and as necessary* | |

## Hospital Preparedness for Emergencies (HOPE)

### Purpose:

The Hospital Preparedness for Emergencies (HOPE) Course addresses the structural, nonstructural, organizational, and medical concerns of health facilities to develop and implement well-designed plans that increase their capacity to respond effectively to emergencies.

### Background:

HOPE is a four-day course of the Program for Enhancement of Emergency Response (PEER) that was developed by the United States Agency for International Development (USAID) through its Office of U.S. Foreign Disaster Assistance (OFDA) together in collaboration with Johns Hopkins University, Asian Disaster Preparedness Center, National Society for Earthquake Technology-Nepal, and a team of leading experts from throughout the Asia Pacific region. The course has been tested and delivered in Bangladesh, Cambodia, India, Indonesia, Lao PDR, Nepal, Pakistan, the Philippines, Thailand, and Vietnam.

### Target Audience:

The first HOPE Course in each PEER country is intended for medical experts with expertise in the field of emergency medicine and disaster preparedness and serving as faculty or lecturers at appropriate institutions where future HOPE courses can be conducted. Accordingly, the first course in each country is intended to train future HOPE instructors. Subsequent HOPE courses are intended for members of hospital disaster management committees, including hospital administrators, hospital engineers, emergency room physicians, nurses, and hospital planning staff. The ideal number of participants for HOPE is 24, however, it can accommodate a maximum 28 number of participants.

### Course Methodology and Content:

HOPE is a 32-hour course delivered in four days by a course coordinator, five lead instructors with the help of two assistant instructors. On top of eight instructors, an experienced course monitor is assigned for overall supervision of course delivery. Methodology includes interactive lectures and discussions, case studies and a variety of exercises and simulations. The course consists of 25 interactive lectures and six exercises. Materials include an Instructor Guide, Lesson Plans, Participant Workbook, Coordinator Guide and Reference Materials.

The course focuses on the following issues and topics:

- Overview of Disasters and Disaster Risk Management
- Epidemiology of Disasters and Patterns of Injury
- Overview of Hazards
- Structural Components
- Non-Structural Components
- Functional Collapse of Hospitals
- Techno Industrial Disasters
- Complex Emergencies
- Epidemics and Emerging Infections
- Mass Casualty Incidents
- Mass Gathering Medical Care
- Principles of Disaster Medicine
- Pre-Hospital Care
- Triage
- Resuscitation and Emergency Care
- Hospital Incident Command System (HICS)
- Hospital Preparedness Planning
- Emergency Department
- Hospital Internal Disasters
- Onsite Medical Care
- Disaster Risk Communication
- Interagency Coordination
- Mass Fatality Management
- Psychological Consequences of Disasters
- Return to Normal Operations

### Performance Objective:

By the end of the course, the student will be able to conduct a vulnerability assessment of the hospital and develop a hospital disaster plan.

### Instructional Objectives:

Upon course completion, participants will be able to describe the relationship between hospitals and disasters; apply a method of judging or qualifying seismically functional/operational components of a hospital; simulate a mass casualty incident addressing the roles and responsibilities of each component of HICS; discuss the basic requirements in the medical aspects of managing mass casualties and to demonstrate stress debriefing; apply concepts learned in on-site medical care to specific situations; and prepare an outline of a hospital disaster preparedness plan including response and recovery.

## Lesson Summaries

### Lesson 1: Course Overview

General information, administrative details about the course, introduction of participants.

### Lesson 2: Overview of Disasters

The aim of this session is to introduce the basic terminology of Disaster Management and the importance of hospital and community preparedness. In addition, the concepts of disaster risk management will be discussed.

### Lesson 3: Disaster Risk Management

The aim of this session is to introduce the context within which the HOPE course takes place. In addition, this lesson discusses disaster risk management terminologies and describes the conceptual evolution of disaster risk management concepts globally.

### Lesson 4: Disaster Epidemiology and Patterns of Injury

The aim of this session is to introduce the concept of disaster epidemiology and the patterns of injuries associated with them. The effect of disasters on hospital is also addressed.

### Lesson 5: Overview of Hazards

The aim of this session is to introduce various hazards and their effect on hospitals.

### Lesson 6: Structural Components

The aim of this session is to discuss the structural components that can be affected during a disaster, particularly for earthquake, flood, high wind and fire.

### Lesson 7: Non-Structural Components

The aim of this session is to discuss the non-structural components that can be affected during disasters.

### Lesson 8: Functional Collapse of Hospitals

The aim of this session is to discuss the loss of hospital function that may occur during disasters and factors to be considered in evaluation of hospitals after the disaster.

### Lesson 9: Techno-Industrial Disasters

The aim of this session is to discuss disasters that are caused by the development of technology and the growth of industrialization.

### Lesson 10: Complex Emergencies

The aim of this session is to discuss other human-induced disasters, specifically complex emergencies.

### Lesson 11: Epidemics and Emerging Infections

The aim of this session is to discuss an overview of epidemics and infections that may occur during or after a disaster.

### Lesson 12: Mass Casualty Incident

The aim of this session is to introduce the participants to mass casualty incidents (MCI) and how to approach an MCI.

### Lesson 13: Mass Gathering Medical Care

The aim of this session is to discuss potential vulnerability of mass gathering and enumerate the salient features that involve the planning process of mass gathering medical care.

### Lesson 14: Principles of Disaster Medicine

The aim of this session is to discuss the principles of disaster medicine and the key concepts in regard to the chain of disaster medicine.

### Lesson 15: Pre-Hospital Care

The aim of this session is to discuss the emergency medical system and its function within the context of emergency and disaster care.

### Lesson 16: Triage

The aim of this session is to discuss the approach to triage and the different types of triage scenarios. It will also present the history and application of triage in medical practice. Another highlight is on the pearls and pitfalls of triage in an everyday situation.

### Lesson 17: Hospital Incident Command System (HICS)

The aim of this session is to introduce the concept of disaster management and the applicability of the Hospital Incident Command System.

### Lesson 18: Hospital Preparedness Planning

The aim of this session is to discuss the process of disaster planning and the execution of this plan.

### Lesson 19: Emergency Department

The aim of this session is to introduce emergency department concepts and operations. This will discuss the system that emergency medical care functions in and the key personnel in that system.

### Lesson 20: Hospital Internal Disasters

The aim of this session is to discuss the essential elements of the hospital evacuation plan.

### Lesson 21: On-site Medical Care

The aim of this session is to discuss on-site medical facilities in the context of the disaster settings. Focus will be towards doing a scene assessment and designing the layout of the facilities.

### Lesson 22: Disaster Risk Communication

The aim of this session is to go over a variety of topics related to disaster risk communication. The topics range in spectrum to informing the community of the disaster risk, developing early warning systems, managing information, and dealing with media and relatives.

### Lesson 23: Inter-agency Coordination

The aim of this session is to discuss the major national and international response capabilities during a disaster. The incorporation and liaison with these institutions will also be discussed.

### Lesson 24: Mass Fatality Management

The aim of this session is to discuss the issues related to the management of mass fatality in a disaster setting.

### Lesson 25: Psychosocial Consequences of Disaster

The aim of this session is to discuss the mental health issues after a disaster. Focus will be towards not only discussing the immediate and long-term mental health issues, but also some self-help techniques that are useful.

### Lesson 26: Return to Normal Hospital Operation

The aim of this session is to discuss some of the issues related to when a hospital returns to normal functioning and its return to normal health operations.

## Exercise Summaries

### Exercise 1: Structural Components Evaluation

The aim of this exercise is to do structural evaluation of hospitals after a disaster.

### Exercise 2: Potential Injury Causing Events (PICE)

The aim of this exercise is to do a Mass Casualty Incident grading using the PICE nomenclature.

### Exercise 3: Triage Exercise

The aim of this exercise is to do Field Triage of patients using the START Protocol.

### Exercise 4: Hospital Incident Command System (HICS)

The aim of this session is to discuss the role and responsibilities under MCI and identify debriefing requirements.

### Exercise 5: Hospital Internal Disasters

The aim of this session is to discuss and understand the essential elements and issues of a hospital evacuation plan.

### Exercise 6: Mass Casualty Incident (MCI) Management Exercise

The aim of this session is to introduce the student to their final exercise on Mass Casualty Management.

## Sample HOPE Course Schedule

Day 0 Instructors Meeting

Day 1

| Time | Lessons |
|---|---|
| 08:00 – 09:00 | Registration + Pre-Test |
| 09:00 – 10:00 | **Lesson 1:** Course Introduction |
| 10:00 – 10:30 | Opening Ceremony |
| 10:30 – 10:45 | Tea Break |
| 10:45 – 12:00 | **Lesson 2:** Overview of Disasters |
| 12:00 – 12:45 | **Lesson 3:** Disaster Risk Management |
| 12:45 – 13:30 | Lunch Break |
| 13:30 – 14:30 | **Lesson 4:** Disaster Epidemiology and Patterns of Injury |
| 14:30 – 15:15 | **Lesson 5:** Overview of Hazards |
| 15:15 – 15:30 | Tea Break |
| 15:30 – 16:45 | **Lesson 6:** Structural Components |
| 16:45 – 17:45 | **Exercise 1:** Structural Component Evaluation |
| 17:45 – 18:00 | Review and Questions |

Day 2

| Time | Lessons |
|---|---|
| 08:00 – 08:30 | Review |
| 08:30 – 09:30 | **Lesson 7:** Non-structural Components |
| 09:30 – 10:30 | **Lesson 8:** Functional Collapse of Hospitals |
| 10:30 – 10:45 | Tea Break |
| 10:45 – 11:30 | **Lesson 9:** Techno Industrial Disasters |
| 11:30 – 12:15 | **Lesson 10:** Complex Emergencies |
| 12:15 – 13:00 | **Lesson 11:** Epidemics and Emerging Infections |
| 13:00 – 13:45 | Lunch Break |
| 13:45 – 14:15 | **Lesson 12:** Mass Casualty Incident |
| 14:15 – 14:45 | **Lesson 13:** Mass Gathering Medical Care |
| 14:45 – 15:30 | **Lesson 14:** Principles of Disaster Medicine |
| 15:30 – 16:15 | **Lesson 15:** Pre-Hospital Care |
| 16:15 – 16:30 | Tea Break |
| 16:30 – 17:00 | **Exercise 2:** PICE |
| 17:00 – 17:30 | **Lesson 16:** Triage |
| 17:30 – 18:00 | **Exercise 3:** Triage |
| 18:00 – 18:15 | Review and questions |

Day 3

| Time | Lessons |
|---|---|
| 8:00 – 8:30 | Review |
| 8:30 – 9:30 | **Lesson 17:** Hospital Incident Command System (HICS) |
| 9:30 – 11:00 | **Exercise 4:** HICS Exercise/Working Tea Break |
| 11:00 – 12:00 | **Lesson 18:** Hospital Preparedness Planning |
| 12:00 – 12:45 | **Lesson 19:** Emergency Department |
| 12:45 – 13:15 | **Lesson 20:** Hospital Internal Disasters |
| 13:15 – 14:00 | Lunch Break |
| 14:00 – 14:45 | **Lesson 21:** Onsite Medical Care |
| 14:45 – 15:30 | **Lesson 22:** Disaster Risk Communication |
| 15:30 – 16:00 | **Lesson 23:** Interagency Coordination |
| 16:00 – 17:30 | **Exercise 5:** Hospital Internal Disasters |
| 17:30 – 17:45 | Tea Break |
| 17:45 – 18:00 | **Exercise 6:** Handing Over the Exercise |
| 18:00 – 18:15 | Questions and Review |

Day 4

| Time | Lessons |
|---|---|
| 8:00 – 8:30 | Review |
| 8:30 – 9:15 | **Lesson 24:** Mass Fatality Management |
| 9:15 – 9:45 | **Lesson 25:** Psychological Consequences of Disasters |
| 9:45 – 10:15 | **Lesson 26:** Return to Normal Health Operations |
| 10:15 – 10:30 | Tea Break |
| 10:30 – 13:30 | **Exercise 6:** Presentation of Exercise 6 |
| 13:30 – 14:15 | Lunch Break |
| 14:15 – 14:45 | **Post Test** |
| 14:45 – 15:30 | Conclusion/Course Evaluation |
| 15:30 onward | Closing Program |
| * Course Coordinator may need to modify this as required and as necessary* | |

## Community Action for Disaster Response (CADRE)

### Purpose:

The purpose of this course is to develop community level disaster responders. It aims to bridge the gap before the arrival on-site of professional emergency responders.

### Background:

CADRE is a four-day course of the Program for Enhancement of Emergency Response (PEER) that was developed by the United States Agency for International Development through its Office of U.S. Foreign Disaster Assistance (USAID/OFDA) with the help of American Red Cross, Red Cross-National Societies and Asian Disaster Preparedness Center (ADPC). CADRE curriculum draws upon the basic elements from other PEER training: Medical First Responder (MFR) and Collapsed Structure Search and Rescue (CSSR) courses. The course has been delivered in Bangladesh, Cambodia, India, Indonesia, Lao PDR, Nepal, Pakistan, Philippines, and Vietnam.

### Implementing Partners:

Red Cross-National Societies are the foremost implementing partner for CADRE. In India, NSET works with SEEDS for CADRE implementation.

### Target Audience:

Community level volunteers or lay persons capable of being an Emergency Community Responder. The ideal number of participants for CADRE is 24, however, it can accommodate a maximum 28 number of participants. There should be at least 18 participants for conducting this course.

### Course Methodology and Content:

CADRE was initially designed for three days, however, considering the need for adequate time for practical exercises and recommendations received from senior instructors during courses and in the PEER Stage 4 Regional Course Review Workshop (CRW) in July 2015, CADRE is at present scheduled for four days. The course is led by a Course Coordinator, five lead/full instructors with three assistant instructors using the interactive lecture method (ILM) of instruction that is objective based, performance oriented, tested, and highly participatory. The experience of the instructors is enriched by the interaction between the participants. On top of nine

instructors, an experienced Course Monitor is assigned for overall supervision of course delivery.

Interactive lectures and demonstration practice sessions are used to present the course content with exercises and evaluations used to assess participant learning.

CADRE Course lessons highlight on:

- Common hazards and community response
- Family preparedness and preparing for response
- First aid and Basic Life Support
- Incident Command System and Triage
- Dead body management in disasters
- Fire Emergencies
- Basic Search and Rescue
- Basic water rescue

### Performance Objective:

Given a simulated disaster incident and equipment available in the community, participants working in teams with 6 to 7 members will search for, locate, stabilize, and extricate several victims of a simulated disaster incident in no more than 1.5 hours.

### Instructional Objectives:

At the completion of this course, the participants should be able to:

1. Familiarize themselves with the operational sequence of a community responder, being a member of the family and securing its wellbeing before deciding to join the community response team.
2. Gather information and formulate a plan of action to search and locate possible trapped victims.
3. Conduct Community Quick Response Sorting Technique, evacuate and transport victims safely in the event of an emergency or a disaster.

## CADRE Lesson Summaries

### Lesson 1: Introduction

General information and administration details of the course

### Lesson 2: Common Hazards and the Community Response Group

Consequences of hazards and community responders' role

### Lesson 3: Securing Family and Preparing for Response and Incident Command System (ICS)

Family Disaster Plan and basic concept of ICS

### Lesson 4: Basic Life Support

General procedures of Basic Life Support (BLS) / Cardiopulmonary Resuscitation (CPR)

### Lesson 5: Basic First Aid and Triage

Basic first aid concepts and skills; and Community Quick Response Sorting Technique

### Lesson 6: Dead Body Management

Factors, common consequences and handling of dead bodies, roles, and responsibilities of community responders in handling dead bodies, how to store dead bodies.

### Lesson 7: Fire Emergencies

Define what is fire, list the elements of fire, identify the classes of fire, identify the methods of extinguishment, name the parts of a portable fire extinguisher, demonstrate the use of a fire extinguisher, demonstrate the use of the "Bucket Brigade", list at least 5 common water emergencies.

### Lesson 8: Basic Search Techniques

Definition of basic search. Most common techniques in searching a structure. International Search and Rescue Advisory Group (INSARAG) marking process.

### Lesson 9: Basic Rescue Techniques

Define rescue techniques. Most common rescue techniques in a structure. Lifting techniques. Cribbing. Types of structural collapse.

### Lesson 10: Water Emergencies

List the general rules for water safety, demonstrate 6 knots used for joining and securing ropes, demonstrate the 2 types of extension assist.

### Lesson 11: Other Emergencies

Signs and symptoms of common emergencies [e.g., bites and stings, poisoning, heat cramps, heat exhaustion, heat stroke and Acute Mountain Sickness (AMS)] and pre-hospital treatment for these.

### Lesson 12: Final Practical Exercise

Securing your well- being and family members, scene size-up and search, Community Quick Response Sorting Technique, Community Light Search and Rescue, management of the dead, interfacing with professional responders.

### Lesson 13: Course Review

Questions from the participants. Review of issues recorded in the "File"

## Sample CADRE Course Schedule

| Day 1 | Day 2 |
|---|---|
| 08:30-09:00 Welcome and Registration<br>09:00-10:30 – Lesson 1: Course Introduction<br>Pre-Test<br>10:30-11:15 – Lesson 2: Common Hazards, the Community Response Group<br>11:15-11:30 – Tea break<br>11:30-12:15 – Lesson 3: Securing Family<br>Preparing for Response and ICS<br>12:15-13:00 – Lesson 4: Basic Life Support<br>13:00-14:00 – Lunch & Prayer<br>14:00-14:30 – Practical Station (CPR)<br>14:30-15:30 – Lesson 5: Basic First Aid and Triage<br>15:30-15:45 – Tea Break<br>15:45-17:45 – Practical Station (FA)<br>17:45-18:00 – Daily Evaluation | 09:00-09:15 – Morning roll call<br>09:15-10:00 – Practical Station (Triage)<br>10:00-10:45 – Lesson 6: Dead Body Management<br>10:45-11:15 – Practical Station (DBM)<br>11:15-11:30 – Tea break<br>11:45-12:30 – Lesson 7: Fire Emergencies<br>12:30-13:30 – Practical Station (L- 7 Fire Extinguisher and Bucket Brigade)<br>13:30-14:30 – Lunch Break<br>14:30-15:00 – Unit test one<br>15:45-16:30 – Lesson 8: Basic Search Techniques<br>16:30-17:15 – Practical (L-8)<br>17:15-17:30 – Tea Break<br>17:30-17:45 – Daily Evaluation |
| **Day 3** | **Day 4** |
| 09:00- 09:15 – Roll Call<br>09:15- 09:45 – Lesson 9: Basic Rescue Techniques<br>09:45-10:45 – Practical Station (L-9)<br>10:45-11:00 – Tea Break<br>11:00-11:45 – Lesson 10: Water Emergencies<br>11:45-13:45 – Practical Exercise<br>13:45-14:45 – Lunch<br>14:45-16:45 – Lesson 11: Other Emergencies<br>16:45-17:15 – Unit Test 2<br>17:15-17:30 – Tea Break<br>17:30-17:45 – Daily evaluation | 09:00-09:15 – Morning roll call<br>09:15-10:00 – Lesson 12: Briefing on final exercise and preparation<br>10:00-10:15 – Tea Break<br>10:15-11:15 – Final Practical (Group One)<br>11:15-12:15 – Final Practical (Group Two)<br>12:15-12:45 – TEA restoration<br>12:45-13:45 – Lunch Break<br>13:45-14:30 – Lesson 13: Course Review<br>14:30-15:15 – Post Test and Course Evaluation<br>15:15-16:15 – Certification and Closing |
| * Course Coordinator may need to modify this as required and as necessary* | |

# Swift Water Rescue (SWR)

## Purpose:

The purpose of this course is to provide individuals the knowledge and skills necessary to search for, stabilize and extricate victims in a water-related incident in a swift water/white water scenario using the safest and most appropriate procedures.

## Background:

SWR is a six-day course of the Program for Enhancement of Emergency Response (PEER) that was developed by the United States Agency for International Development through Office of U.S. Foreign Disaster Assistance (USAID/OFDA and National Society for Earthquake Technology-Nepal (NSET), in collaboration with Initiative Outdoor and Rescue 3 International USA. During PEER Stage 4 (2014-2021), the SWR Course has been pilot-tested in May 2018 in Nepal, with participation of the PEER countries, namely, Bangladesh, India, Nepal, and Pakistan; and extension countries – Afghanistan and Bhutan.

## Target Audience:

Emergency and disaster first response groups, i.e., Fire Departments, Red Cross/Red Crescent Societies, Police Departments, and Rescue Groups associated with the government emergency response system.

## Participant Qualification Criteria:

- Preferably, with prior experience on water rescue or has attended related water rescue course(s).
- Preferably, have some background on basic emergency medical response and search and rescue trainings;
- He/She is presently assigned in disaster management or disaster/emergency response unit;
- He/She is proficient in writing and speaking in the English language. English language will be the medium for discussions and in curriculum development;
- He/She must be a strong swimmer in rivers/swift flowing water;
- He/She must be physically and mentally fit; and
- Preferably, 40 years old and below.

## Course Methodology and Content:

PEER SWR Course is a pass/fail course. The SWR course is delivered by 9 instructors, which includes a Course Coordinator and eight (8) instructors using the Interactive Lecture Method (ILM) and Demonstration-Practice (DP) of instruction that is objective based, performance oriented, tested, and highly participatory. The experience of the instructors is enriched by the interaction with and among the participants. Experienced Course Monitor is assigned for overall supervision of course delivery.

Instructors' meeting and practice sessions are scheduled two to three days before the course proper for instructors' meeting, review the use, maintenance and safety precautions for all equipment used in the course: and site visit for the field/water exercises. Interactive lectures and demonstration practice sessions are used to present the course content with exercises and written evaluations used to assess participant learning.

SWR Course lessons highlight on:

- Scene Size-Up
- Rules of Swift Water Rescue
- Rope and Water Rescue Techniques
- Emergency Medical Response
- Strainer drill and Flip drills
- Rescue from Vehicles
- Final Practical Exercises

## Performance Objective:

Given a simulated water rescue incident and water rescue equipment kit, participants working in 6-member teams (optimum 4 groups in a course) will search for, locate, stabilize, and extricate victims of the water incident.

## Instructional Objective:

At the completion of this course, the participants will be able to:

- Define Swift Water Rescue (SWR) and the philosophy of SWR.
- Perform scene size-up at any water incident for proper rescue operation.
- List the different mandatory rules of SWR.
- Identify different personal and team equipment used in SWR operation and explain their proper use at proper time with safety.

- Make knots, anchor and mechanical advantage system for efficient rescue process and conduct rope rescue.
- Define hydrology and river dynamics.
- Conduct search in a water rescue incident.
- Define Incident Command System (ICS) and conduct rescue operations according to ICS.
- Conduct self-rescue and list the different aspects of self-rescue.
- Demonstrate and perform different types of swimming, throw bagging and tethered rescue and different water rescue skills and techniques.
- Demonstrate and perform emergency medical response and victim management at the scene.
- Identify the different types of strainers and perform safety action in strainer situations.
- Demonstrate and perform flip drills.
- Conduct rescue from vehicles.

## Sample SWR Course Schedule

| Day 1 | Day 2 |
|---|---|
| 0800-0830 – Registration/Opening<br>0830-0930 – Lesson 1: Course Introduction<br>0930-1000 – Pretest<br>1000-1045 – Tea Break/Group Photo<br>1045-1200 – Lesson 2: Rescue Instruction Philosophy (TH)<br>1200-1300 – Lunch<br>1300-1400 – Lesson 3: Scene Size-up at a Water Incident (TH)<br>1400-1445 – Lesson 4: The Guidelines of SWR(TH)<br>1445-1615 – Lesson 5: Personal and Team Equipment (TH)<br>1615-1630 – Tea Break<br>1630-1800 – Lesson 5 contd.<br>1800 – Daily Course Evaluation | 0800-0815 – Recap of day 1<br>0815-1045 – Lesson 6: Rope Rescue Techniques (TH and PR)<br>1045-1100 – Tea Break<br>1100-1215 – Lesson 7: Hydrology, River Dynamics, and Hazards (TH)<br>1215-1315 – Lunch Break<br>1315-1415 – Lesson 8: Incident Command System (ICS) (TH)<br>1415-1515- Lesson 9: Search Techniques (TH)<br>1515-1530 – Tea Break<br>1530-1600 – Lesson 10: Swimming, Throw Bagging and Tethered Rescue Techniques (TH)<br>1600-1630 – Lesson 11: Water Rescue Techniques (TH,11A-11B)<br>1630-1645 – Daily Evaluation<br>1645-1715 – Change<br>1715-1830 – Swimming test |
| **Day 3** | Day 4 |
| 0800-0815 – Recap of Day 2<br>0815-0845 – Lesson 11: Water Rescue Techniques (TH, 11C-11E) cont.<br>0845-0900 – Tea Break<br>0900-1000 – Travel to Exercise Venue<br>1000-1100 – Search Techniques (PR)<br>1100-1230 – Lesson 10: Swimming, Throw Bagging and Tethered Rescue (PR)<br>1230-1300 – Lunch (Packed lunch)<br>1300-1430 – Lesson 10: Swimming, Throw Bagging and Tethered Rescue (PR) Cont.<br>1430-1530 – Lesson 11A: Shallow Water Crossing and 11B: Entrapment and Line Crossing Techniques (PR)<br>1530-1630 – Travel back to training venue<br>1630-1715 – Decontamination<br>1715 – Daily Course Evaluation | 0800-0815 – Recap of day 3<br>0815-0900 – Lesson 12: Emergency Medical Response and Victim Management (TH)<br>0900-1100 – Lesson 6: Rope Rescue Techniques Practical Exercise Continue.<br>1100-1115– Tea Break<br>1115-1200 – Travel to exercise venue<br>1200-1330 – Lesson 11C: Strainer Drill and 11D: Flip Drill (Rotation) (PR)<br>1330-1400 – Packed Lunch<br>1400-1600 – Lesson 12: Emergency Medical Response and Victim Management (PR)<br>1600-1700 – Travel back to training venue<br>1700-1800 – Decontamination<br>1800 – Daily Course Evaluation |
| * Course Coordinator may need to modify this as required and as necessary* | |

## Training for Instructors (TFI)

### Purpose:

To train individuals to perform the tasks necessary to be effective instructors of PEER and for non-PEER training courses.

### Background:

TFI is a five-day course of the Program for Enhancement of Emergency Response. It was developed by the United States Agency for International Development through its Office of U.S. Foreign Disaster Assistance in collaboration with the Miami-Dade Fire Rescue Department. Asian Disaster Preparedness Center (ADPC) used this curriculum to conduct TFI as a component of the Program for Enhancement of Emergency Response Stage 1 (PEER1) during 1998 – 2003. NSET continued using this curriculum and strategy while implementing the PEER Program from PEER Stage 2 (2003-2009), PEER Stage 3 (2009-2014) and until present for PEER Stage 4 (2014-2019).

A separate TFI for Hospital Preparedness for Emergencies (HOPE) of PEER was developed and implemented during PEER Stage 2. The TFI English curriculum has been translated into Bangla and Nepali under the PEER program.

Considering the importance of the course and with the objectives of its maximum utilization, NSET has been promoting this course among DRR professionals and institutions in Nepal that are interested in developing capacities and organizing non-formal training on DRR for the adult population.

### Target Audience:

Anyone who is required to train someone else to perform a task. A desire to be an effective instructor is helpful.

### Commitment:

This course requires the undivided attention of the trainee during the course. Trainees and their supervisors should plan accordingly. Trainees will want to keep their evenings free during the period of the course to prepare for the next days' assignment.

## Course Content:

The course contains the following subjects:

- Informing, Persuading, and Instructing
- Communication and Platform Skills
- Purpose and Objectives
- Planning a Lesson
- Communicative Visuals
- Methods of Instruction
- Audio-visual Equipment
- Facilities and Coordination
- Testing and Evaluation
- Classroom Management

## Course Methodology:

The PEER TFI is a pass/fail course, delivered in five days, led by a course coordinator, five full instructors and three assistant instructors using the interactive lecture method (ILM) of instruction that is objective based, performance oriented, tested, and highly participatory. The experience of the instructors is enriched by the interaction between the participants. Experienced course monitor is assigned for overall supervision of course delivery. The optimum class size is 24, in exceptional cases, 28 participants can sit in the training.

## Performance Objective

## Objective 1

Actions: Develop objectives, a lesson plan and visual aids for a training presentation that includes interaction. Use the lesson plan, visual aids, and the necessary visual aid equipment to give the training presentation.

Conditions: A classroom environment suitable for conducting training, a group of participant instructors that will function as participants for the purpose of the presentations, the necessary visual aid equipment (i.e., computer, multimedia projector, and/or flipchart and easel), and the necessary materials to prepare visual aids.

Standards: Presentation will contain at least one training objective, one visual aid, interaction with at least 2 participants and a means of evaluation. Objective, visual

aid and presentation will meet minimum standards established by the course. Presentation will be to the standards established by the course, and within time limits.

## Objective 2

Actions: Participate with a group of other participants in the presentation of a lesson of training. Each group will develop training objectives, lesson plans, visual aids, handouts, and testing. Each group will coordinate its presentation to provide continuity and a smooth flow of training.

Conditions: A classroom environment suitable for conducting training, a group of trainee instructors who will function as trainees for the purposes of training presentations, the necessary visual aid equipment (i.e., computer, multimedia projector, and/or flipchart and easel), and the necessary materials to prepare visual aids.

Standards: Each presentation will contain at least one training objective, one visual aid, interaction with at least 2 participants and a means of evaluation. Objective(s), visual aid(s) and presentation will meet minimum standards established by the course. Presentation will be within time limits, coordinated to provide a smooth flow of training and without a last-minute rush to finish. Participants receiving the training will be evaluated for effectiveness of the training.

## Instructional Objectives:

Upon completion of this course, participants will be able to:

- write performance and instructional objectives
- prepare and use audio-visual aids
- manage a classroom learning environment
- operate audio-visual equipment
- prepare lesson plans
- make presentations as an individual and as a member of a team
- use various methods of instructional communication
- test trainees for training effectiveness

## Sample TFI Course Schedule

| Day 1 | Day 2 |
|---|---|
| 0800 - Registration<br>0815 - Unit 1: Introduction<br>0915- Opening Ceremony<br>0945 – Refreshment<br>1000 - Continue Unit-1<br>1115 - Pretest<br>1145 - Unit 2: Informing, Persuading, and Instructing<br>1245 - Lunch<br>1330 - Unit 3: Communication and Platform Skills<br>1700 - Refreshment<br>1745 - Daily Critique and project work assignment | 0800 - Morning Roll Call<br>0815 - 1st Individual Presentation<br>1015 - Refreshment<br>1030 - Unit 4: Purpose and Objectives<br>1200 - Lunch<br>1300 - Unit 5: Planning a Lesson<br>1500 - Refreshment<br>1515 - Unit 6: Communicative Visuals<br>1630 - Unit 6 Practical Stations<br>1750 - Daily Critique and project work assignment |
| **Day 3** | **Day 4** |
| 0800 - Morning Roll Call<br>0815 - 2nd Individual Presentation<br>1100 - Refreshment<br>1115 - Unit 7: Methods of Instruction<br>1200 - Lunch<br>1300 - Unit 8: Audio/Visual Equipment<br>1400 - Unit 8 Practical Stations<br>1500 - Refreshment<br>1515 - Unit 9: Facilities and Course Coordination<br>1630 - Daily Critique and project work assignment | 0800 - Morning Roll Call<br>0815 - Unit 10: Classroom Management<br>0945 - Unit 11: Testing and Evaluation<br>1030 - Refreshment<br>1045 - Unit 11 cont.<br>1130 - Unit 12: Group Meetings<br>1230 - Lunch<br>1330 – UNIT 13: Concepts in Adult Learning.<br>1430 - General Course Review<br>1600 - Post-test<br>1645 - Refreshment<br>1700 - Daily Critique and project work assignment<br>1730 - Project work period |

| Day 5 |
| --- |
| 0800 - Morning roll call<br>0815 - Project work period<br>0945 - Refreshment<br>1000 - Group Presentations<br>1200 - Lunch<br>1300 - Group Presentations<br>1500 - Evaluation<br>1600 - Closing Ceremony<br>1700 - Refreshment |
| * Course Coordinator may need to modify this as required and as necessary* |

## Master Instructors' Workshop (MIW)

### Purpose:

The MIW aims to develop potential Course Coordinators and Course Monitors under the PEER process. The workshop provides comprehensive instructor training information and skills practice for relatively inexperienced trainers; and to improve the skills of experienced trainers within the context of current PEER training programs, towards enhancing their skills as course coordinators and monitors.

### Background:

MIW is a five-day workshop of the Program for Enhancement of Emergency Response that was developed by the United States Agency for International Development (USAID) through its Office of U.S. Foreign Disaster Assistance (OFDA) together in collaboration with the Safety Solutions Incorporated (SSI), and National Society for Earthquake Technology-Nepal (NSET).

### Target Audience:

Suggested class size is from 18 to 28 participants. The target learning audience consists of new as well as experienced instructors who lead PEER courses related to the Medical First Responder (MFR), Collapsed Structure Search and Rescue (CSSR), Community Action for Disaster Response (CADRE); and for Training for Instructors (TFI).

### Course Methodology and Content:

The course is delivered in five days by six to seven facilitators using the interactive lecture method (ILM) of instruction that is objective based, performance oriented, tested, and highly participatory. The experience of the instructors is enriched by the interaction between the participants. Interactive lectures and group work sessions are used to present the course content with team activities used to assess participant learning.

- Roles and Responsibilities of Master Instructors
- Course Adaptations and Translation
- Course Coordination
- Course Monitoring, Certification and Evaluation
- Team Building, Trouble shooting and Problem Solving
- Networking
- Case Analysis

## Performance Objective:

Participants will be required to present one lesson (from the PEER MFR, CSSR, CADRE or TFI courses), including course introduction or final evaluation in a group of six to seven, following the PEER course lesson plans and using visual aids, equipment, and the interactive method of teaching. Each participant will also be required to exercise lesson monitoring to be evaluated by facilitators utilizing the checklist.

## Instructional Objectives:

At the completion of this course, the participants will be able to:

- Define the PEER program objectives and list the roles, qualifications, and qualities of a master instructor.
- List the procedure for adapting the PEER course materials.
- List guidelines on course materials translation.
- Define the course coordinator's responsibilities and other members of the instructors' team.
- List the tools necessary for effective course coordination and implementation.
- List and describe the six main standards of PEER on course implementation.
- List the three types of PEER Course evaluation and three levels of certification system.
- Describe the importance of team building and icebreakers in delivering PEER courses.
- List some appropriate solutions for possible problems to be encountered in conducting PEER courses.
- Describe the importance of networking.
- List the course documents required in PEER course implementation.

## Participants' Criteria:

The following are the criteria for participant selection based on the PEER's standard criteria on participant selection:

1. Nominees must be from any of the identified training institutions for PEER implementation in the country;
2. Nominees should be identified based on their capacity and potential to become MFR/CSSR/CADRE/TFI Course Coordinators and/or Monitors;

3. The nominees must have completed PEER standard MFR, CSSR, Training for Instructors, MFR Instructors' Workshop, and CSSR Instructors' Workshop courses; and/or CADRE and CADRE Training for Instructors/Instructors Workshop;
4. Preferred nominees are those who have served as full or assistant instructors in MFR, CSSR and/or CADRE courses; and/or the TFI courses.
5. The nominee must be able to speak, read, write, and understand English fluently. English language will be the medium of instruction in the Regional MIW.
6. Nominee must have the support and approval of their sponsoring institutions in becoming future Master Instructor candidates (future Course Coordinators and Course Monitors);
7. Nominees must commit and be available to help instruct PEER training courses within their respective countries and other PEER beneficiary countries; and
8. Preferably, nominees should be 40 years of age or younger and/or at least 15 years from retirement.

# Medical First Responder Instructors' Workshop (MFRIW)

## Purpose:

The Medical First Responder Instructors' Workshop (MFRIW) aims to provide participants with the knowledge and practical skills necessary to become a Medical First Responder (MFR) Course instructor.

## Background:

MFRIW is a five-day course of the Program for Enhancement of Emergency Response that was developed by the United States Agency for International Development through Office of U.S. Foreign Disaster Assistance (USAID/OFDA) together in collaboration with the Miami-Dade Fire Rescue Department, Asian Disaster Preparedness Center (ADPC), and National Society for Earthquake Technology-Nepal (NSET). The course has been delivered in Thailand, Bangladesh, India, Indonesia, Nepal, Pakistan, and the Philippines.

## Target Audience:

The MFRIW course in each PEER country is intended for emergency and disaster first response groups i.e., Fire Departments, Red Cross/Red Crescent Societies, Police Departments, and rescue groups associated with the government emergency response system. Individuals are required to have successfully completed the PEER MFR course and Training for Instructors (TFI).

## Standards:

Lesson content must be presented following the interactive method of instruction, using the lesson plans and all associated materials and equipment, as described in the MFR Course guidelines and within established time limits.

## Course Methodology and Content:

PEER MFRIW is a pass/fail course. The workshop is delivered in five days, led by a course coordinator, 5 lead instructors and 3 assistant instructors, using the Interactive Lecture Method (ILM) of instruction that is objective based, performance oriented, tested, and highly participatory. The experience of the instructors is enriched by the interaction between the participants. Experienced course monitor is assigned for overall supervision of course delivery.

Highlights of MFRIW are as follows:

- Introduction
- MFR Course Review
- Course Methodology
- Communication and Presentation Skills
- Objectives, Evaluation and Exercises
- Course Materials and Audio/Visual Aids
- Preparing and Presenting a Lesson
- Facilities and Classroom Management
- MFR Course Coordination
- Managing Practical Stations and Exercises
- MFR Evaluation System Components
- Maintaining and Storing Equipment and Supplies
- Individual Presentations

## Performance Objective:

Participants will be required to present two assigned lessons in a group of six following lesson plans and using visual aids, equipment, and the interactive method of teaching. One is for Individual Lesson Presentation and the other Individual Practical Presentation. Individual Lesson Presentation tests the presenting individual's knowledge on MFR course and his/her potential or ability in delivering an interactive lecture method of teaching. Individual Practical Presentation tests the individual's ability to facilitate a MFR skills station, including evaluation of his/her participants. The lecture presentation will last a maximum of 40 minutes and the practical presentation a maximum of 50 minutes. The instructors will always be available to guide participants in preparation of their presentations. These two presentations will be scored, and attendees must satisfactorily achieve the passing scores for both an Individual Lecture Presentation and an Individual Practical Demonstration. Cardiopulmonary Resuscitation (CPR)/Basic Life Support (BLS) is a key lesson in MFR course; hence, participants are also required to pass the CPR/BLS skills test given at the beginning of the MFRIW.

## Sample MFRIW Course Schedule

| Day 1 | Day 2 |
|---|---|
| 08:00 – **Registration**<br>08:30 – **Lesson 1:** Introduction to the Workshop<br>10:45 – Break<br>11:00 – **Pre-Work Review**<br>11:30 – **CPR/FBAO Evaluations**<br>13:30 – Lunch<br>14:30 – Makeup session for CPR FBAO<br>15:30 – Break<br>15:45 – Daily Evaluation | 08:00 – **Lesson 2:** Managing Practical Stations and Exercises<br>10:00 – Break<br>10:15 – Lesson 2<br>13:15 – Lunch<br>14:15 – **Lesson 3:** MFR Evaluation System<br>15:15 – Break<br>15:30 – Lesson 3 (cont'd.)<br>16:30 – Daily Evaluation |
| **Day 3** | **Day 4** |
| 08:00 – **Lesson 4:** MFR Course Coordination<br>10:00 – Break<br>10:15 – **Lesson 5:** Maintaining and Storing Equipment and Supplies<br>11:30 – **Lesson 6:** MFR Course Review<br>12:30 – Daily Evaluation<br>13:00 – Lunch<br>Open – **Preparation time for individual presentations** | 08:00 – **Lesson 7:** Individual Lecture Presentations<br>10:00 – Break<br>10:15 – Lesson 7 (cont'd.)<br>13:15 – Lunch<br>14:15 – Lesson 7 (cont'd.)<br>17:15 – Break<br>17:30 – Daily Evaluation<br>17:45 – **Make-up session for lecture presentations** |
| **Day 5** | |
| 08:00 – **Lesson 7:** Individual Practical Presentations<br>10:00 – Break<br>10:15 – Lesson 7 (cont'd.)<br>12:15 – Lunch<br>13:15 – Lesson 7 (cont'd.)<br>15:15 – Break<br>15:30 – Lesson 7 (cont'd.)<br>Open – Make-**up session for practical presentations**<br>Open – Daily Evaluation<br>Open – **Closing Ceremony** | |
| * Course Coordinator may need to modify this as required and as necessary* | |

# Collapsed Structure Search and Rescue Instructors' Workshop (CSSRIW)

## Purpose:

Collapsed Structure Search and Rescue Instructors' Workshop (CSSRIW) aims to provide participants with the knowledge and practical skills necessary to become a Collapsed Structure Search and Rescue (CSSR) Instructor.

## Background:

CSSRIW is a seven-day course of the Program for Enhancement of Emergency Response that was developed by the United States Agency for International Development through Office of U.S. Foreign Disaster Assistance (USAID/OFDA) in collaboration with the Miami-Dade Fire Rescue Department, Asian Disaster Preparedness Center (ADPC), and National Society for Earthquake Technology Nepal (NSET). The course has been delivered in Bangladesh, India, Indonesia, Nepal, Pakistan, and the Philippines.

## Target Audience:

The CSSRIW course in each PEER country is intended for Emergency and Disaster First Response Groups, i.e., Fire Departments, Red Cross/Red Crescent Societies, Police Departments, Rescue groups associated with the government emergency response system. Individuals are required to have successfully completed the CSSR and Training for Instructors (TFI) Course.

## Standards:

Lesson content must be presented following the interactive method of instruction, using the lesson plans and all associated materials and equipment, as described in the CSSR Course guidelines and within established time limits.

## Course Methodology and Content:

PEER CSSRIW is a pass/fail course. The workshop is delivered in seven days led by a course coordinator, five lead instructors and three assistant instructors using the Interactive Lecture Method (ILM) of instruction that is objective based, performance oriented, tested, and highly participatory. The experience of the instructors is enriched by the interaction between the participants. Experienced course monitor is assigned for overall supervision of course delivery.

A practice session is scheduled the day before the classes begin for participants to review the use, maintenance and safety precautions for all equipment discussed in the pre-work. CSSRIW highlights include:

- Introduction
- Principles of Adult Learning
- How to Prepare and Present a CSSR Lesson
- CSSR Review Group
- Managing Practical Stations and Exercises
- CSSR Course Evaluation System
- Using the Coordinator's Guide
- Tool and Equipment Cleaning and Maintenance
- Individual Presentations

### Performance Objective:

Participants will be required to present one lesson, lecture, and to demonstrate how to conduct two practical CSSR exercises, following the lesson plans and using visual aids, equipment, and the interactive method of teaching. The lecture presentation will last a maximum of 60 minutes and the practical presentations a maximum of 20 minutes per presentation. These three individual presentations will be scored, and participants must satisfactorily achieve the passing scores for all. At the beginning of the workshop, participants will be tested on their ability to correctly operate and maintain the various tools, equipment, and accessories (TEA) used in the CSSR Course. Passing this evaluation is a requirement for participating in the CSSRIW.

## Sample CSSRIW Course Schedule

| Day 1 | Day 2 |
|---|---|
| 07:30 – Participant registration<br>07:45 – Pre-Work verification and Safety Test<br>09:00 – TEA operation evaluation<br>11:00 – Break<br>11:15 – continuation TEA opn/eval<br>13:00 – Lunch and Prayer<br>14:00 – T.E.A. operation evaluation (cont'd.)<br>15:30 – Tools Rehab<br>16:00 – **Lesson 1:** Introduction. Lesson and responsibility assignments.<br>17:30 – Daily Evaluation<br>19:00 – Dinner<br>20:00 – CSSR Review Group Session (2 hours) | 08:00 – **Lesson 2:** Principles of Adult Learning<br>09:00 – **Lesson 3:** How to Prepare and Present a CSSR Lesson (Using the Instructor's Guide)<br>11:00 – Break<br>11:15 – **Lesson 4:** CSSR Review Group Session<br>12:45 – Lunch and Prayer<br>13:30 – Individual Training Short Presentations (practice)<br>15:30 – Break<br>15:45 – Individual Training Short Presentations (cont'd.)<br>17:30 – Daily Evaluation |
| **Day 3** | **Day 4** |
| 08:00 – **Lesson 5:** Managing Practical Stations and Exercises<br>10:00 – **Lesson 6:** CSSR Course Evaluation System<br>11:00 - Break<br>11:15 - **Lesson 7:** Using the Coordinator's Guide<br>12:45 – Lunch and Prayer<br>13:45 – **Lesson 8:** Tool and Equipment Cleaning and Maintenance<br>14:45 – Individual preparation time for lectures and practical<br>15:00 – Break<br>15:15 – Individual preparation time for lectures and practical's<br>16:45 – Daily Evaluation | 08:00 – **Q&A session for lecture presentations**<br>09:00 – Individual preparation time for lectures and practical's<br>10:00 – Break<br>10:15 – Individual preparation time for lectures and practical's<br>12:30 – Lunch and Prayer<br>13:30 – **Individual Lecture Presentations**<br>15:00 Break<br>15:15 – Individual Lecture Presentations (cont'd.)<br>17:30 – Daily Evaluation |

| Day 5 | Day 6 |
|---|---|
| 08:00 – Individual Lecture Presentations (cont'd.)<br>10:00 – Break<br>10:30 – Individual Lecture Presentations (cont'd.)<br>12:30 – Lunch and Prayer<br>13:30 – **Q&A session for practical presentations**<br>15:00 – Break<br>15:30 - Continuation<br>16:15 – Daily Evaluation<br>16:45 – **Individual preparation time** / **Make-up session for lecture presentations** | 08:00 – **Individual Practical #1 – Presentations**<br>10:00 – Break<br>10:15 – Individual Practical #1 – Presentations (cont'd.)<br>12:30 – Lunch and Prayer<br>13:30 – **Individual Practical #2 – Presentations**<br>15:30 – Break<br>15:45 – Individual Practical #2 – Presentations (cont'd.)<br>18:30 – Daily Evaluation |
| Day 7 | |
| 08:00 – **Make-up session for practical presentations**<br>10:00 – Break<br>10:30 – Daily Evaluation<br>11:00 – **Closing Ceremony** followed by Lunch and Prayer<br>14:30 – Tool/equipment maintenance, cleaning, and storage; pack course materials<br>**16:00 – End of activities** | |
| * Course Coordinator may need to modify this as required and as necessary* | |

## HOPE-Training for Instructors (H-TFI)

### Purpose:

To train individuals to perform the tasks necessary to be effective instructors of HOPE courses.

### Background:

H-TFI is a five-day course of the Program for Enhancement of Emergency Response (PEER) that was designed in 2005 with support from the United States Agency for International Development / Office of U.S. Foreign Disaster Assistance (USAID/OFDA). H-TFI curriculum was based on the PEER TFI design, integrating presentation of HOPE lessons. H-TFI is a pass/fail course.

### Target Audience:

HOPE Course graduates who are required to train other HOPE course potential participants to perform a task. A desire to be an effective instructor is helpful.

### Commitment:

This course requires the undivided attention of the trainee during the course. Trainees and their supervisors should plan accordingly. Trainees will want to keep their evenings free during the period of the course to prepare for the next days' assignment.

### Conditions:

Each participant will be provided with the HOPE Lesson Plan, Course Coordinator Guide, HOPE Participant Workbook and other necessary materials including audio/visuals, supplies and equipment. Presentations will be made in a suitable classroom set-up. Each group of participants will have a facilitator/guide to advise them.

### Course Methodology:

The workshop is delivered in five days by six full instructors (including Course Coordinator) with three assistant instructors using the interactive lecture method (ILM) of instruction that is objective-based, performance oriented, tested, and highly participatory. The experience of the instructors is enriched by the interaction between the participants. An experienced Course Monitor will be assigned for overall supervision of course delivery.

## Performance Objectives:

### Objective 1

Actions: Develop objectives, a lesson plan and visual aids for a training presentation that includes interaction. Use the lesson plan, visual aids, and the necessary visual aid equipment to give the training presentation.

Conditions: A classroom environment suitable for conducting training, a group of participants and instructors that will function as participants for the purpose of the presentations, the necessary visual aid equipment (i.e., multimedia projector and/or flipchart and easel), and the necessary materials to prepare visual aids.

Standards: Presentation will contain at least one training objective, one visual aid, interaction with at least 2 participants and a means of evaluation. Objective, visual aid and presentation will meet minimum standards established by the course. Presentation will be to the standards established by the course, and within time limits.

### Objective 2

Actions: Present in a group with other participants in the presentation of a HOPE lesson. Each participant will use the training objectives, lesson plans, visual aids, handouts, and testing.

Conditions: A classroom environment suitable for conducting training, a group of trainee instructors who will function as trainees for the purposes of training presentations, the necessary visual aid equipment (i.e., multimedia projector and/or flipchart and easel), and the necessary materials to prepare visual aids.

Standards: Each presentation will contain the training objective, visual aid, interaction with at least 2 participants and a means of evaluation. Objective(s), visual aid(s) and presentation will meet minimum standards established by the course. Presentation will be within time limits, coordinated to provide a smooth flow of training and without a last-minute rush to finish. Participants receiving the training will be evaluated for effectiveness of the training.

## Instructional Objectives:

Upon completion of this course, participants will be able to:

- write performance and instructional objectives.
- manage a classroom learning environment.

- prepare lesson plans.
- use various methods of instructional communication.
- prepare and use audio-visual aids.
- operate audio-visual equipment.
- make presentations as an individual and as a member of a team.
- test trainees for training effectiveness.
- facilitate group meetings
- review the HOPE lessons
- list the procedure for managing HOPE exercises
- list the evaluation system for HOPE course

# Community Action for Disaster Response-Training for Instructors/Instructors' Workshop (CADRE-TFI/IW)

## Lesson Summary

### Lesson 1 - Introduction

Introduce Workshop staff/personnel, Expectations, materials to be used, Inspection of personal protective equipment. Purpose, performance objectives, Instructional objectives. testing/evaluation system, schedule, workshop evaluation forms, workshop registration form, liability release form, health and nutritional requirements form, administrative issues, emergency procedures, "file", lesson assignments.

### Lesson 2- Principles of Adult Learning

Definition of learning. Types of learning. Maslow's Hierarchy of Needs. Factors that influence adult learning. Individual differences in adult learning. Types of adult learners.

### Lesson 3 - How to Prepare and Present a CADRE Lesson

Lesson plan components. Sequence criteria. Instructions on how to use a CADRE lesson plan. CADRE Instructor's Guide.

### Lesson 4-Managing Practical Stations and Exercises

General guidelines for practical stations and exercises. Specific instructions as needed for individual lessons. Managing the Final Practical Exercise,

### Lesson 5-CADRE Course Evaluation Method

Ongoing evaluation during practical stations. Evaluating the Final Practical Exercise.

### Lesson 6- Using the CADRE Course Coordinator's Guide

Coordinator's Guide Layout. Timeline. Planning. Precautions and problem solving

## Individual Presentations

Individual presentation of two lecture-based and one practical-based lesson.

## Sample CADRE-TFI/IW Course Schedule

| Day 1 | Day 2 |
|---|---|
| 0830 - Unit 1: Introduction<br>1030 - Refreshment<br>1100 - Unit 2: Informing, Persuading, and Instructing<br>1200 - Unit 3: Communication and Platform Skills<br>1300 - Lunch<br>1400 – Continue Communication and Platform Skills<br>1500 -Unit 4: Purpose and Objectives<br>1630 - Refreshment<br>1645 - Unit 5: Planning a Lesson<br>1815 – Daily Evaluation | 0830 - Morning Roll Call<br>0845 - Unit 6: Communicative Visuals<br>1015 - Refreshment<br>1030 - Individual Practice Presentation<br>1230 – Lunch & Prayer<br>1400 - Unit 7: Methods of Instruction<br>1500 – Refreshment<br>1515- Unit 8: Audio/Visual Equipment<br>1615 – Daily Evaluation |
| **Day 3**<br>0830 - Morning Roll Call<br>0845 - Practical Stations Lesson- 8<br>0945 - Refreshment<br>1000 - Unit 9: Facilities and Course Coordination<br>1100– Unit 10: Classroom Management<br>1200 - Unit 11: Testing and Evaluation<br>1330 - Lunch<br>1430 - Unit 12: Group Exercise Meetings<br>1530 - Refreshment<br>1545 – General Course Review<br>1645- – Daily Evaluation | Day 4<br>0830 - Morning Roll Call<br>0845 – Lesson 1: CIW Overview<br>1045 - Refreshment<br>1100 – Lesson 2: Principles of Adult Learning<br>1200 - Lesson 3: How to Prepare and Present a CADRE Lesson (Using the Instructor's Guide)<br>1300 - Lunch<br>1400 – Lesson 4: Managing Practical Station and Exercises<br>1530 - Refreshment<br>1545 –Lesson 5: CADRE Course Evaluation System<br>1645 – Lesson 6: Using the Coordinator's Guide<br>1800 – Daily Evaluation |

| Day 5 | Day 6 |
|---|---|
| 0830 - Morning roll call<br>0845 - Q&A session for lecture/practical presentations<br>1015 - Refreshment<br>1045 - Individual preparation time for 1st lectures<br>1215 –1st Individual Lecture Presentation<br>1300 - Lunch<br>1400 –1st Individual Lecture Presentation Cont.…<br>1530 - Refreshment<br>1600 - 1st Individual Lecture Presentation Cont.…<br>1800 – Daily Evaluation | 08:30– (CONT) 1st lecture presentations<br>10:00 – Cont.<br>10:30 – Refreshment<br>11:00 – (Cont.) 1st Lecture Presentations<br>12:00 – Lunch<br>13:00 – 2nd Individual Lecture Presentations<br>15:30 – Break<br>15:45 – 2nd Individual Lecture Presentations (cont'd.)<br>17:30 – Daily Evaluation |
| **Day 7** | **Day 8** |
| 08:30 – (CONT) 2nd Individual Lecture Presentations<br>10:00 – Cont.<br>11:30 – Break<br>11:00 – Cont.<br>12:00 – Lunch<br>13:00 – Practical Presentations<br>16:00 – Break<br>16:15 – Practical Presentations (cont'd)<br>17:30- Daily Evaluation | 08:30 –Practical Presentations (cont'd)<br>10:00 – Break<br>10:15 – Make-up session for practical presentations<br>12:30 – Lunch<br>13:30 – Tool/equipment maintenance, cleaning, and storage; pack course materials<br>15:30 – Closing Ceremonies<br>14:30 – End of Activities |
| * Course Coordinator may need to modify this as required and as necessary* | |

# Annex 2: PEER PARTNER INSTITUTIONS

## Stage 1

| Country | Partner Organizations |
|---|---|
| India | **Ministry of Home Affairs – Nodal Agency**<br>• Ministry of Defense<br>• Ministry of Health & Family Welfare<br>• Ministry of External Affairs<br>• Indian Red Cross<br>• National Center for Disaster Management<br>• All Indian Institute of Medical Science |
| Indonesia | • BAKORNAS PB<br>• Indonesian Red Cross<br>• Ambulan Gawat Darurat 118<br>• Ministry of Health<br>• BASARNAS<br>• Indonesian Scouts Movement<br>• Jakarta Fire Service<br>• Jakarta Metropolitan Administration |
| Nepal | **Ministry of Home Affairs – Nodal Agency**<br>• Nepali Army<br>• Nepal Police<br>• Ministry of Health<br>• Nepal Red Cross |
| Philippines | **National Disaster Coordinating Council – Focal Point**<br>• Joint operations command, Philippine Military<br>• Bureau of Fire Services<br>• Metro Manila Development Authority<br>• Philippine National Red Cross<br>• Department of Health<br>• Emergency Management Institute of the Philippines<br>• Philippine General Hospital, University of the Philippines |

## Stage 2

| Country | Partner Organizations |
|---|---|
| Bangladesh | **Ministry of Food and Disaster Management – Nodal Agency**<br>• Fire Service and Civil Defense (FSCD) – Training Institute for MFR and CSSR Courses<br>• Ministry of Health and Family Welfare, Directorate General, Health Services – Focal Point for HOPE Course<br>• National Institute of Preventive and Social Medicine (NIPSOM) – Training Institute for HOPE Course<br>**PEER ICC** – Mr. Muhammad Saidur Rahman, Director, Bangladesh Disaster Preparedness Center (BDPC) |
| India | **Ministry of Home Affairs - Natural Disaster Management Division – Nodal Agency**<br>• National Disaster Management Authority (NDMA) – Focal Organization for MFR and CSSR Courses<br>• Central Industrial Security Force (CISF)/National Industrial Security Academy (NISA) – Partner Organizations/Training Institutes for MFR and CSSR Courses<br>• Ministry of Health and Family Welfare – Focal Agency for HOPE Course<br>• Indo-Tibetan Border Police (ITBP)/National Institute for Training in Search, Rescue and Disaster Response (NITSRDR)<br>• Border Security Force (BSF)/BSF Training Institute of Disaster Response (BTIDR)<br>• Central Reserve Police (CRPF)/Central Training College – II (CTC-II) CBE<br>**PEER ICC** – Prof. Vinod Kumar Sharma, Professor of Disaster Management, Indian Institute of Public Administration |
| Indonesia | **Badan Koordinasi Nasional (BAKORNAS) – Nodal Agency**<br>• Badan Search and Rescue Nasional (BASARNAS) – Partner Organizations/Training Institutes for MFR and CSSR Courses<br>• Indonesia Fire Service<br>• Ambulan 118<br>• Ministry of Health – Focal Agency for HOPE Course<br>**PEER ICC** – Dr. Suryadi Soedarmo, Training Director, Director of Training Division |

| | |
|---|---|
| Nepal | **Ministry of Home Affairs – Nodal Agency**<br>• Nepal Police – Focal Agency for MFR and CSSR Courses<br>• Nepal Police Academy – Training Institute for MFR and CSSR Courses<br>• Nepali Army<br>• Armed Police Force<br>• Nepal Red Cross Society<br>• Ministry of Health and Population – Nodal Agency for HOPE Course<br>• Institute of Medicine (IOM) – Focal Organization for HOPE Course |
| Pakistan | **National Disaster Management Authority (NDMA) – Nodal Agency**<br>• Punjab Emergency Services (PES)/Rescue 1122 – Partner Organization/Institute for MFR and CSSR Courses<br>• Ministry of Health – Focal Agency for HOPE Course<br>• Health Services Academy – Partnering Institute for HOPE Course<br>**PEER ICC** – Mr. Sameer Luqman, United Nations Development Program (UNDP) Islamabad, Pakistan |
| Philippines | **National Disaster Coordinating Council – Office of Civil Defense (NDCC - OCD) – Nodal Agency**<br>• Bureau of Fire Protection (BFP), Fire National Training Institute (FNTI), Amity Public Safety Academy (APSA) – Partnering Institutes for MFR and CSSR Courses<br>**PEER ICC** – Atty. Priscilla P Duque, MNSA<br>**PEER Country Consultant** – Dr. Edgar Felix L. Posadas, CFP |

## Stage 3

| Country | Partner Organizations |
|---|---|
| Bangladesh | **Ministry of Disaster Management and Relief – Department of Disaster Management – Nodal Agency**<br>• Fire Service and Civil Defense (FSCD) Training Complex– Training Institute for MFR and CSSR Courses<br>**PEER ICC** – Mr. Muhammad Saidur Rahman, Director, Bangladesh Disaster Preparedness Center (BDPC) |

| Country | Partner Organizations |
|---|---|
| India | **Ministry of Home Affairs - Natural Disaster Management Division – Nodal Agency**<br>• National Disaster Management Authority (NDMA) – Focal Organization for MFR and CSSR Courses<br>• National Disaster Response Force (NDRF), Central Industrial Security Force (CISF)/National Industrial Security Academy (NISA) – Partner Organizations/Training Institutes for MFR and CSSR Courses<br>• Indo-Tibetan Border Police (ITBP)/National Institute for Training in Search, Rescue and Disaster Response (NITSRDR)<br>• Border Security Force (BSF)/BSF Training Institute of Disaster Response (BTIDR)<br>• Central Reserve Police (CRPF)/Central Training College – II (CTC-II) CBE<br>**PEER ICC** – Prof. Vinod Kumar Sharma, Professor of Disaster Management, Indian Institute of Public Administration |
| Indonesia | **Badan Nasional Penanggulangan Bencana (BNPB) – Nodal Agency**<br>• Indonesia Fire Service<br>• Badan Search and Rescue Nasional (BASARNAS)<br>• Pelang Merah Indonesia (PMI)<br>**PEER ICC** – Dr. Suryadi Soedarmo, Training Director, Director of Training Division |
| Nepal | **Ministry of Home Affairs – Nodal Agency**<br>• Nepal Police – Focal Agency for MFR and CSSR Courses<br>**Training Institutes/Partnering Organizations for MFR and CSSR Courses**<br>• Nepal Police Academy – Training Institute for MFR and CSSR Courses<br>• Nepali Army<br>• Armed Police Force<br>• Nepal Red Cross Society |
| Pakistan | **National Disaster Management Authority (NDMA) – Nodal Agency**<br>Punjab Emergency Services (PES)/ Rescue 1122/ Emergency Services Academy – Partner Organization/Institute for MFR and CSSR Courses |
| Philippines | **National Disaster Coordinating Council – Office of Civil Defense (NDCC - OCD) – Nodal Agency**<br>National Fire Training Institute (NFTI), Amity Public Safety Academy (APSA) – Partnering Institutes for MFR and CSSR Courses |

## Stage 4

| Country | Partner Organizations |
|---|---|
| **Bangladesh** | • Nodal Agency: Department of Disaster Management-Ministry of Disaster Management and Relief<br>• Focal Institution for MFR-CSSR: Bangladesh Fire Service and Civil Defense<br>• Focal Institution for HOPE: National Institute for Preventive and Social Medicine<br>• Focal Institution for CADRE: Bangladesh Red Crescent Society<br>• PEER In-Country Consultant: Mr. Muhammad Saidur Rahman |
| **India** | • Nodal Agency: National Disaster Management Authority<br>• Focal Institution for MFR-CSSR-CADRE: National Disaster Response Force India<br>• Focal Institution for HOPE: Indian Medical Association<br>• PEER In-Country Consultant: Prof. Dr. Vinod Kumar Sharma |
| **Nepal** | • Nodal Agency: National Disaster Risk Reduction and Management Authority and Ministry of Home Affairs<br>• Focal Institution for MFR-CSSR: Nepal Police<br>• Other partner institutions for MFR-CSSR: Nepali Army, Armed Police Force Nepal<br>• Focal Institution for HOPE: Institute of Medicine-Tribhuvan University; Health Emergency Disaster Management Unit/Health Emergency Operations Center-Ministry of Health and Population<br>• Focal Institution for CADRE: Nepal Red Cross Society<br>• Focal Institution SWR: Initiative Outdoor<br>• Selected partner municipalities |
| **Pakistan** | • Nodal Agency: National Disaster Management Authority<br>• Focal Institution for MFR-CSSR-SWR: Punjab Emergency Service (PES) Rescue 1122<br>• Focal Institution for HOPE: National Health Emergency Preparedness and Response Network<br>• Focal Institution for CADRE: Pakistan Red Crescent Society<br>• PEER In-Country Consultant: Mr. Falak Nawaz<br>• Network of Disaster Management Practitioners |
| **Afghanistan** | Afghanistan National Disaster Management Authority (ANDMA) |
| **Bhutan** | Department of Disaster Management (DDM) – Ministry of Home and Cultural Affairs |
| **Maldives** | National Disaster Management Authority (NDMA) |
| **Sri Lanka** | Disaster Management Center (DMC)<br>Ministry of Health |

# Annex 3: PEER CERTIFICATES


Figure 1: PEER Certification of Attendance


Figure 2: PEER Certificate of Completion


Figure 3: PEER Certificate of Appreciation

# Annex 4: LIST OF MEETINGS AND WORKSHOPS

## Stage 1

Table 1 List of major meetings/workshops conducted in PEER Stage 1

| Meetings/Workshops | Date | Location |
|---|---|---|
| Core Group Meeting | 6-7 Jan 1999 | Miami, USA |
| Core Group Meeting | 2-5 Mar 1999 | Bangkok, Thailand |
| Regional Planning Meeting | 4-7 Apr 1999 | |
| Core Group Meeting | 29 Nov - 1 Dec 1999 | Bangkok, Thailand |
| Core Group Meeting | 5-8 Dec 2000 | Kathmandu, Nepal |
| Core Group Meeting | 26-27 Nov 2001 | Kathmandu, Nepal |

## Stage 2

Table 2 List of major meetings/workshops conducted in PEER Stage 2

| Meetings/Workshops | Date | Location |
|---|---|---|
| Country Planning Meeting - Nepal | September 5, 2003 | Nepal |
| Regional Planning Meeting | September 17-19, 2003 | India |
| Country Planning Meeting - India | December 16, 2003 | India |
| Country Planning Meeting - Philippines | January 26-27, 2004 | Philippines |
| Country Planning Meeting - Indonesia | February 3, 2004 | Indonesia |
| Country Planning Meeting - Bangladesh | May 9, 2004 | Bangladesh |
| Country Planning Meeting - Bangladesh | July 5-6, 2005 | Bangladesh |
| Country Planning Meeting - Nepal | July 28-29, 2005 | Nepal |
| Country Planning Meeting - Indonesia | September 8-9, 2005 | Indonesia |
| Country Planning Meeting - Philippines | September 15-16, 2005 | Philippines |
| Regional Planning Meeting | October 26-28, 2005 | Philippines |
| ICC Orientation | October, 2005 | Philippines |
| Country Planning Meeting - India | January 30-31, 2006 | India |
| Country Planning Meeting - Bangladesh | August 12-13, 2006 | Bangladesh |
| Country Planning Meeting - India | January 23-24, 2007 | India |
| Regional Networking Meeting | April 26-28, 2006 | India |

| Meetings/Workshops | Date | Location |
|---|---|---|
| Country Planning Meeting - Indonesia | September 13-14, 2006 | Indonesia |
| Country Planning Meeting - Philippines | September, 2006 | Philippines |
| Country Planning Meeting - Nepal | January 16-17, 2007 | Nepal |
| Country Planning Meeting - Pakistan | February 12-13, 2007 | Pakistan |
| Regional Planning Meeting | March 6-8, 2007 | Indonesia |
| Country Planning Meeting - Pakistan | August 21, 2007 | Pakistan |

## Stage 3

Table 3 List of major meetings/workshops conducted in PEER Stage 3

| Meetings/Workshops | Date | Location |
|---|---|---|
| Country Planning Meeting - Bangladesh | October 2-3, 2009 | Bangladesh |
| Database Management Training – Bangladesh | August 9-10, 2009 | Bangladesh |
| Country Planning Meeting - Indonesia | December 2-3, 2009 | Indonesia |
| Country Planning Meeting - Philippines | December 7-8, 2009 | Philippines |
| Country Planning Meeting - Nepal | December 18, 2009 | Nepal |
| Country Planning Meeting - India (NSET-led) | February 1-2, 2010 | India |
| Country Planning Meeting - Pakistan | July 7, 2010 | Pakistan |
| Database Management Training – Pakistan | July 29-30, 2010 | Philippines |
| Database Management Training - Nepal | February 24-25, 2011 | Nepal |
| Regional Planning Meeting | March 29-31, 2011 | Philippines |
| Database Management Training – Indonesia | June 16-17, 2011 | Indonesia |
| Country Planning Meeting - India (ADPC-led) | August 4-5, 2011 | India |
| Database Management Training – Pakistan | September 6-7, 2011 | Pakistan |
| Regional Database Management Orientation | June 23, 2014 | Nepal |

## Stage 4

Table 4 List of major meetings/workshops conducted in PEER Stage 4

| Meetings/Workshops | Date | Location |
|---|---|---|
| Regional Strategic Planning Workshop | July 21-23, 2015. | Nepal |
| Regional Course Review Workshop | July 24-28, 2015 | Nepal |

| Meetings/Workshops | Date | Location |
|---|---|---|
| Nepal Country Planning Meeting | September 18, 2015 | Nepal |
| Bangladesh Country Planning Meeting | January 20, 2016 | Bangladesh |
| Pakistan Country Planning Meeting | January 27, 2016 | Pakistan |
| India Country Planning Meeting | February 8, 2016 | India |
| Swift Water Rescue (SWR) Brainstorming Workshop | June 28-30, 2016 | Nepal |
| Exploratory Visit to Bhutan for possible PEER extension | March 27, 2017, to April 2, 2017 | Bhutan |
| Nepal Progress Review Meeting (NPRM) | April 12, 2017 | Nepal |
| India Progress Review Meeting (IPRM) | May 31, 2017 | India |
| PEER Nepal Progress Review Meeting | May 6, 2018 | Nepal |
| PEER Swift Water Rescue (SWR) Course Finalization Workshop | May 7-8, 2018 | Nepal |
| Emergency Response Stakeholders Meeting in Nepal | June 7, 2018 | Nepal |
| Training for Instructors (TFI) Course Review Workshop | October 31 to November 2, 2018 | Nepal |
| PEER Chief of Party meetings with Focal Points in Pakistan | February 25, 2019 | Pakistan |
| PEER Team meeting in India | March 26-29, 2019 | India |
| PEER Meetings in Sri Lanka | April 5, 2019 | Sri Lanka |
| PEER Transitional Coordination Meeting in Bangkok | 4 September 2019 | Thailand |
| PEER-South Asia Regional Planning Meeting | October 15-16 2019 | Thailand |
| Participation in Nepal National Consultation Meeting for PEER-South Asia | November 29, 2019 | Nepal |
| PEER Briefing/Progress Review Meeting with National Disaster Risk Reduction and Management Authority (NDRRMA-Government of Nepal) | April 16, 2021 | Nepal |
| PEER Stage IV Regional Lessons Learned Conference | September 21-22, 2021 | Nepal |

# Annex 5: COURSE STREAMS FOR INSTRUCTORS' DEVELOPMENT

**Table 1** shows different paths/streams of courses one can take to develop into a complete instructor or even a master instructor, or a course coordinator, and finally a course monitor.

Table 1 Different lines for PEER Instructor Development

| | |
|---|---|
| Line #1<br>**MFR FULL INSTRUCTOR.** | MFR → TFI → MFRIW → MFR Assistant Instructor → MFR Full Instructor.<br>A potential instructor candidate undergoes and completes MFR course then proceeds to TFI, then goes to MFRIW. After completion of MFRIW, the same candidate may be qualified to serve as Assistant Instructor, for at least in one MFR course prior to serving as Full Instructor. |
| Line #2<br>**MFR FULL INSTRUCTOR** | MFR → CSSR → TFI → MFRIW → MFR Assistant Instructor → MFR Full Instructor<br>Since PEER Phase 2, MFR course has become a minimum requirement prior to completing CSSR. The potential instructor candidate who successfully completes MFR and CSSR course shall be recommended to proceed to TFI, then to MFRIW. Based on some factors, he/she may be more effective as an instructor for MFR courses only. |
| Line #3<br>**CSSR FULL INSTRUCTOR** | MFR → CSSR → TFI → CSSRIW → CSSR Assistant Instructor → CSSR Full Instructor<br>Since PEER Phase 2, MFR course has become a minimum requirement prior to completing CSSR. The potential instructor candidate who successfully completes MFR and CSSR course shall be recommended to proceed to TFI, then to CSSRIW. Based on some factors, he/she may be more effective as an instructor for CSSR course only. |
| Line #4<br>**MFR AND CSSR INSTRUCTOR** | MFR → CSSR → TFI → MFRIW → CSSRIW → MFR and CSSR Instructor (Assistant then to Full Instructor)<br>The potential instructor candidate who successfully completes MFR and CSSR courses shall be recommended to proceed to TFI. The instructor candidate may be highly skilled and has demonstrated capabilities to teach both courses, hence, they may qualify and take up MFRIW and CSSRIW after completing TFI. |

| | |
|---|---|
| Line #5<br>**HOPE FULL INSTRUCTOR** | HOPE  H-TFI  HOPE Assistant Instructor  HOPE Full Instructor <br>The potential instructor candidate who successfully completes HOPE course shall be recommended to proceed to H-TFI. After completion of H-TFI, the same candidate may qualify to serve as Assistant Instructor, for at least in one HOPE course prior to serving as Full Instructor. This deleted portion should be put in the monitor and coordinator portion. |
| Line #6<br>**CADRE FULL INSTRUCTOR** | CADRE  CADRE-TFI/IW  CADRE Assistant Instructor  CADRE Full Instructor<br>The potential instructor candidate who successfully completes CADRE course shall be recommended to proceed to CADRE-TFI/IW. After completion of CADRE-TFI/IW, the same candidate may qualify to serve as Assistant Instructor, for at least in one CADRE course prior to serving as Full Instructor. |

Note: MFR has been a prerequisite for CSSR courses since PEER Phase 2.

As stated in the above instructor development flow, a PEER-certified IW graduate (or H-TFI graduate for HOPE) becomes a full-fledged MFR/CSSR/HOPE/CADRE instructor after having served as Assistant Instructor in the appropriate course. Having demonstrated satisfactory performance during his/her exposure as Assistant Instructor, he/she may advance to the status of a Full Instructor in subsequent courses. Eventually, after gaining adequate experience as Full Instructor, the PEER MFR/CSSR/CADRE instructor participates in the Master Instructors' Workshop (MIW), in preparation for the future role of the Course Coordinator and Course Monitor.

Deleted part from HOPE here.

| | |
|---|---|
| Line #7<br>**COURSE COORDINATOR  COURSE MONITOR** | MFRIW/CSSRIW/CADRE-TFI/IW/HOPE-TFI  MIW  Course Coordinator  Course Monitor<br>A MFR/CSSR/CADRE instructor who has served either Assistant Instructor, or both as Assistant and Full Instructor, has the potential to become Course Coordinator (CC) and Course Monitor (CM) may undergo MIW. MIW graduates then qualify to be nominated as CCs then may later be upgraded to CMs.<br>The HOPE Course instructors' development process for HOPE master instructors largely depends on the maximum practical engagement as full instructor, Course Coordinator then to Course Monitor. |

# Annex 6: LIST OF EQUIPMENT FOR COURSES

## CSSR Training Equipment List

Table 1 List of equipment required for CSSR Course

| S.N. | Description | Quantity | Unit |
|---|---|---|---|
| 1 | Bolt-cutter, 14" | 2 | Set |
| 2 | Bolt-cutter, 30" | 2 | Set |
| 3 | Come-along, rescue type (Hoist) - 1400 g capacity | 4 | Set |
| 4 | Crowbar, 24" | 4 | Set |
| 5 | Chisel, diamond-point (3/8 point) | 4 | Set |
| 6 | Chisel, flat (3/4 to 1 inch wide) | 4 | Set |
| 7 | Hack Saw (10–12-inch blade) | 5 | Set |
| 7.1 | Hacksaw replacement blades | 20 | Pc |
| 8 | Levels, 60 cm | 4 | set |
| 9 | Hydraulic Jack (12 tons) | 4 | set |
| 10 | Hammers (standard carpenter's) | 8 | set |
| 11 | Hand Drill | 4 | set |
| 12 | Pry bar, 6 ft | 16 | Pc |
| 13 | Carpenter (Hand) Saw 24" | 5 | Pc |
| 14 | Shovels, rounded or spade | 4 | Pc |
| 15 | Sledgehammer (4.5 - 6 Kg) | 8 | Pc |
| 16 | Tin Snips | 4 | Pc |
| 17 | Crescent wrench, 30 cm | 4 | set |
| 18 | Screwdriver set, slot and Philips head with tool kit box | 4 | set |
| 19 | Keyhole saw - 15cm blade | 4 | set |
| 20 | Measuring Tape (metric) - 20 mt | 8 | Pc |
| 21 | Carpenter's Square (Framing Square) | 8 | Pc |
| 22 | Chainsaw, gas or electric, 18 inches | 4 | set |
| 22.1 | Chainsaw replacement chain | 4 | Pc |
| 23 | Rotary Hammer Drill (5 kg) | 4 | set |

| S.N. | Description | Quantity | Unit |
|---|---|---|---|
| 23.1 | Rotary Hammer Drill bits, Flat | 4 | Pc |
| 23.2 | Rotary Hammer Drill, Pointed | 4 | Pc |
| 24 | Circular saw | 4 | set |
| 24.1 | Circular saw blade replacements - wood | 4 | Pc |
| 25 | Drill, electric, reversible 1/2-inch chuck | 4 | set |
| 25.1 | Drill bits (electric) for metal / wood | 2 | Pc |
| 26 | Reciprocating Saw | 4 | set |
| 26.1 | Reciprocating saw replacement - wood | 2 | Pc |
| 26.2 | Reciprocating saw replacement blades - metal | 2 | Pc |
| 27 | Demolition Hammer Drill - 10 Kg | 4 | set |
| 27.1 | Demolition Hammer Drill Bits, Flat, 30-45 cm long | 2 | Pc |
| 27.2 | Demolition Hammer Drill Bits, Pointed, 30-45 cm long | 2 | Pc |
| 28 | Rotary Rescue Saw K12 | 4 | set |
| 28.1 | Rotary rescue saw replacement blades - cutting concrete | 2 | Pc |
| 28.2 | Rotary rescue saw replacement blades -cutting metal | 2 | Pc |
| 28.3 | Rotary rescue saw replacement blades - cutting wood | 2 | Pc |
| 29 | Megaphone | 2 | set |
| 30 | Fire Extinguisher, 20 lbs. | 2 | set |
| 31 | Safety Vest | 6 | Pc |
| 32 | Scene tape roll | 6 | roll |
| 33 | Fan for confined spaces with hose | 2 | set |
| 34 | Lighting equipment with extension cord | 4 | set |
| 35 | Thermos (drinking water, 10 ltr capacity) | 4 | set |
| 36 | Safety cones | 12 | Pc |
| 37 | Generator, portable 4,000 - 5,000 watts | 4 | set |
| 38 | Gallon (Fuel) Container | 4 | Pc |
| 39 | Extension cord, 30 Meter, 30 Amp | 4 | set |
| 40 | Snake Eye (Search camera) | 1 | set |

## MFR Training Equipment List

Table 2 List of equipment required for MFR Course

| SN | Item | Quantity | Unit | Availability |
|---|---|---|---|---|
| 1 | Airway, Oropharyngeal airway, Size 00 | 2 | Packs | Packing 1x50 |
| 2 | Airway, Oropharyngeal airway, Size 0 | 2 | Packs | Packing 1x51 |
| 3 | Airway, Oropharyngeal airway, Size 1 | 2 | Packs | Packing 1x52 |
| 4 | Airway, Oropharyngeal airway, Size 2 | 2 | Packs | Packing 1x53 |
| 5 | Airway, Oropharyngeal airway, Size 3 | 2 | Packs | Packing 1x54 |
| 6 | Airway, Oropharyngeal airway, Size 4 | 2 | Packs | Packing 1x55 |
| 7 | Bag-Valve-Mask (BVM) / Resuscitator, Adult | 4 | Sets | Box 1x1 set |
| 8 | Bag-Valve-Mask (BVM) / Resuscitator, Infant | 4 | Sets | Box 1x1 set |
| 9 | Mask, Resuscitator, Adult | 1 | Pc | Pack 1x1 |
| 10 | Mask, Resuscitator, Child | 1 | Pc | Pack 1x1 |
| 11 | Mask, Resuscitator, Infant | 1 | Pc | Pack 1x1 |
| 12 | Mask, Resuscitator, Infant (Newborn) | 1 | Pc | Pack 1x1 |
| 13 | Band-Aid, 1" X 3" | 2 | Packs | Pack 1x100 |
| 14 | Bandage, Elastic 3" Ace | 9 | Packs | Pack 1x12 |
| 15 | Bandage, Elastic 6" Ace | 9 | Packs | Pack 1x12 |
| 16 | Bandage, Kling 6" | 10 | Packs | Pack 1x10 |
| 17 | Bandage, Kling 3" | 10 | Packs | Pack 1x10 |
| 18 | Bandage, Triangular, 40" X 40" | 100 | Pcs | Pack 1x1 |
| 19 | Bite Sticks | 25 | Pcs | Pack 1x1 |
| 20 | Blood Pressure Kit, Adult | 4 | Sets | Pack 1x1 |
| 21 | Case, Stiff-necked Collar (carry bag) | 1 | Set | Pack 1x1 |
| 22 | Collar, Stiff-necked, Regular (Adult) | 4 | Sets | Pack 1x1 |
| 23 | Collar, Stiff-necked, Short (Adult) | 4 | Sets | Pack 1x1 |
| 24 | Collar, Stiff-necked, No Neck (Adult) | 4 | Sets | Pack 1x1 |
| 25 | Collar, Stiff-necked, Pediatrics | 4 | Sets | Pack 1x1 |
| 26 | Stiff-necked, Baby No-Neck | 4 | Sets | Pack 1x1 |
| 27 | Cup, Plastic | 1 | Pack | Pack 1x100 |

| SN | Item | Quantity | Unit | Availability |
|---|---|---|---|---|
| 28 | Depressor, Tongue (wood) | 2 | Boxes | Pack 1x50 |
| 29 | Dressing, 10 in x 30 in (25.4cm x 76.2cm) | 25 | Pcs | Pack 1x1 |
| 30 | Dressing, 8 in x 10 in (20.4cm x 25.4 cm) - trauma dressing | 50 | Pcs | Pack 1x1 |
| 31 | Gauze, Dressing Vaseline | 2 | Packs | Pack 1x1 |
| 32 | Glasses, Eye Protection | 40 | Pcs | Pack 1x1 |
| 33 | Glove, Non-Sterile, Latex, Small | 5 | Packs | Pack 1x100 |
| 34 | Glove, Non-Sterile, Latex, Medium | 6 | Packs | Pack 1x100 |
| 35 | Glove, Non-Sterile, Latex, Large | 6 | Packs | Pack 1x 100 |
| 36 | Mask, Oxygen, Adult, Simple | 25 | Pcs | Pack 1x1 |
| 37 | Mask, Oxygen, Adult, Non-Rebreather | 25 | Pcs | Pack 1x1 |
| 38 | Mask, Oxygen, Pediatric, Simple | 25 | Pcs | Pack 1x1 |
| 39 | Mask, Oxygen, Pedia, Non-Rebreather | 25 | Pcs | Pack 1x1 |
| 40 | Disposable surgical mask | 300 | Pcs | Pack 1x1 |
| 41 | Obstetrical Kit, Disposable | 4 | Sets | Pack 1x1 |
| 42 | Oxygen Cannula, Nasal | 20 | Pcs | Pack 1x1 |
| 43 | Oxygen Tubing, Extension | 20 | Pcs | Pack 1x1 |
| 44 | Penlight | 6 | Pcs | Pack 1x1 |
| 45 | Regulator, Oxygen (with humidifier) | 2 | Sets | Pack 1x1 |
| 46 | Restrain, Patient / backboard straps | 15 | Sets | Pack 1x1 |
| 47 | Scissors, Paramedic (trauma scissors) | 6 | pairs | Pack 1x1 |
| 48 | Stethoscope, Regular (dual head) | 4 | Sets | Pack 1x1 |
| 49 | Sponge, Sterile, 4" X 4" (gauze sponge) | 10 | Packs | Pack 1x20 |
| 50 | Sponge, Non-Sterile, 4" X 4" (gauze sponge) | 10 | Packs | Pack 1x20 |
| 51 | Tape, Paper/Micropore 1" | 5 | Packs | Pack 1x10 |
| 52 | Tape, Paper/Micropore 2" | 5 | Packs | Pack 1x10 |
| 53 | CPR Manikin (Infant) | 3 | Sets | Pack 1x4 |
| 54 | CPR Manikin (Adult) | 3 | Sets | Pack 1x4 |
| 55 | Deluxe O.B. Manikin | 2 | Sets | Set 1x1 |
| 56 | CPR Pocket Mask | 4 | Sets | Set 1x1 |
| 57 | Training Stethoscope | 2 | Sets | Set 1x1 |

| SN | Item | Quantity | Unit | Availability |
|---|---|---|---|---|
| 58 | Splint Set, Padded Board | 4 | Bundles | Bundle 1x10 |
| 59 | MFR kit / trauma kit (hard case) | 2 | Pc | Pack 1x1 |
| 60 | MFR kit / trauma kit (soft case) | 2 | Pc | Pack 1x1 |
| 61 | Manikin Face Shields | 2 | Boxes | Pack 1x1 rolls x 36 |
| 62 | Spine board, long | 2 | Pc | Pack 1x1 pc |
| 63 | Head Immobilizer, Speed blocks | 2 | Set | Pack 1x1 set |
| 64 | Spine board, short | 1 | Set | Pack 1x1 |
| 65 | Triage tags / ribbons | 40 | Roll | Pack 1x1 roll |
| 66 | Oxygen cylinders (D or E size), with case | 2 | Cylinder | Pack 1x1 |
| 67 | AHA 2010 CPR Guidelines + BLS DVD and manual | 1 | Sets | Pack 1x1 |
| 68 | Container Box, 48" | 2 | sets | |

## CADRE Training Equipment List

Table 3 List of equipment required for CADRE course

| SN | Equipment | Purpose | Qty | Unit |
|---|---|---|---|---|
| A | Search and Rescue TEA | | | |
| A1 | Buckets | For bucket brigade | 15 | Nos |
| A2 | Crow bars | For moving and lifting heavy load | 3 | Nos |
| A3 | Prybars | For moving and lifting heavy load | 3 | Nos |
| A4 | Sledgehammer | To make purchase point | 2 | Nos |
| A5 | Cotton rope | Rope exercise | 200 | Meters |
| A6 | Tube as per situation | To move heavy load | 12 | Pieces |
| A7 | Gallon | Floating device | 2 | Pieces |
| A8 | Triage ribbons sets (1/2 *18 inches) | To shorting victim in mass casualty | 120 | |
| A9 | Dead body bag | To pack dead body | 5 | |
| A10 | Dead body tag | For identification of dead body | 5 | |
| A11 | Dead body Quin | DBM Exercise | 5 | |

| SN | Equipment | Purpose | Qty | Unit |
|---|---|---|---|---|
| A12 | Spray paints (orange color) | SAR exercise | 5 | |
| A13 | Dummy body parts | DBM Exercise | 4 | sets |
| A14 | Backboard and straps | BLS exercise | 1 | |
| A15 | Tarpaulins | To display TEAs | 4 | pieces |
| A16 | Concrete slab | Exercise for heavy load lifting and stabilizing | 1 | |
| B | **Medical Response** | | | |
| B1 | Bamboo pieces | To make improvised stretcher | 6 | pieces |
| B2 | Blanket | To make improvised stretcher | 4 | pieces |
| B3 | Pillows | BLS exercise | 4 | pieces |
| B4 | Towels | BLS exercise | 4 | pieces |
| B5 | Medical First Responders' Box with materials | Medical exercise | 4 | |
| B6 | Splints | For exercise of stabilizing the fractures | 2 | sets |
| B7 | Cravats/Triangular bandages | Different purpose | 150 | Nos |
| C | **Woods supplies** | | | |
| C1 | Cribber (10*10*45 cm) | To hold the heavy load | 70 | |
| C2 | Cribber(5*10*45cm) | To hold the heavy load | 10 | |
| C3 | Sim (5*10*30 cm) | To adjust the opening | 8 | |
| C4 | Sim (10*10*45 cm) | To adjust the opening | 8 | |
| D | **Safety Materials** | | | |
| D1 | Fire extinguisher and refilling charge (5 kgs) | Fire response exercise | 12 | |
| D2 | Latex gloves | To perform medical procedure | 5 | boxes |
| D3 | Medical masks | For the indoor exercises | 3 | boxes |
| D4 | Normal dust masks | For outdoor exercises | 40 | pieces |
| D5 | Safety vest | For safety officer | 10 | |
| D6 | Scene tape cone | To hold scene tape | 30 | |
| D7 | Scene tape rolls | To secure the working area | 2 | roll |
| D8 | Life jackets | To be safe from hazards | 15 | pieces |

| SN | Equipment | Purpose | Qty | Unit |
|---|---|---|---|---|
| E | Support Equipment/materials | | | |
| E1 | Generator | To give back up power | 1 | |
| E2 | Petrol | To run generator | 50 | liters |
| E3 | Fuel container (20 ltrs) | To store petrol | 3 | |
| E4 | Megaphone | Making voice loud during SAR | 2 | |
| E5 | Batteries | For Megaphone | 3 | Dozen |
| E6 | Water container (tank) 1000 ltr. | Storing water for fire response exercise | 1 | |
| E7 | Water drum | For fire response exercise | 2 | |
| E8 | Drinking water container | Drinking water in the exercise areas | 1 | |
| E9 | Water Pipe | For fire response exercise | 2 | |
| E10 | Other Consumable items | Water, paper glasses , wood and preparation of simulation exercise etc. | 1 | |
| E11 | Steel Container | For storing all Equipment | 2 | |
| F | Personal protective equipment (* to be arranged by individuals) | | | |
| F1 | Head torch | To make area visible | 40 | |
| F2 | Heavy duty work gloves | To protect hand from possible injuries | 40 | pair/each |
| F3 | knee pads | To protect knee from possible injuries | 40 | pair/each |
| F4 | Raincoats | Protection in rain | 40 | |
| F5 | Steel toe safety boot* | To prevent possible injuries in foot | 0 | pair/each |
| F6 | Safety goggles | To prevent eye from possible hazards | 40 | pair/each |
| F7 | Safety helmet with chin strap | To protect head from possible injuries | 40 | pair/each |
| F8 | Whistle | To give safety alert signal | 40 | pair/each |
| F9 | Full sleeve clothes* | To protect body from possible injuries | 0 | |

## SWR Training Equipment List

Table 4 List of equipment required for SWR Course

| SN | Equipment | Purpose | Qty | Unit |
|---|---|---|---|---|
| A. | SWR TOOLS, EQUIPMENT AND ACCESSORIES | | | |
| 1 | Figure of eight | Rappelling | Pcs | 4 |
| 2 | MA Pulley (Single/Prusik minding pulley) | Minimize the friction on rope, | Pcs | 16 |
| 3 | MA Pulley (Double) | Minimize the friction on rope, | Pcs | 9 |
| 4 | Tandem Pulley | Crossing the river, Minimize the friction on rope | Pcs | 12 |
| 5 | PETZL Jumar | Holding the load | Pcs | 4 |
| 6 | Carabineer (Auto Lock) | Holding the load, using for anchor | Pcs | 4 |
| 7 | Carabineer (Oval) Non locker | Holding the load, using for anchor | Pcs | 4 |
| 8 | Carabineer (Screw) | Holding the load, using for anchor | Pcs | 40 |
| 9 | "O" Ring | Pulling the load in multi direction | Pcs | 2 |
| 10 | Anchor Plate | To anchor | Pcs | 4 |
| 11 | Search Light | To search the things during night | Pcs | 4 |
| B. | Water Equipment (PPE) | | | |
| 1 | PFD (Life Jacket Type 5) | To float | Pcs | 32 |
| 2 | PFD (Life Jacket Type 3) | To float | Pcs | 8 |
| 3 | Throw bag (with 20 mtr. long) 8 mm | Personal and group safety, rope rescue | Pcs | 40 |
| 5 | Knife with sheath | Personal Safety | Pcs | 40 |
| 6 | Helmet | Personal Safety | Pcs | 40 |
| 7 | Whistle (Personal) | Personal Safety, Signaling | Pcs | 40 |
| 8 | Gloves | Personal Safety | Pcs | 40 |
| 9 | River Board | Group Safety | Pcs | 4 |
| 10 | Swimming Shoes (Neoprene Shoes or other types) Different Sizes | Personal Set | Pcs | 40 |

| SN | Equipment | Purpose | Qty | Unit |
|---|---|---|---|---|
| 11 | Head Lamp | To work during night | Pcs | 40 |
| | Rescue Tube | Group Safety | Pcs | 4 |
| 12 | Dry Bag (Big Size) | To keep the tools of group | Pcs | 4 |
| C. | Rope Related | | | |
| 1 | Main Rope (Static) 12 mm or 0.5 inch | Crossing the river (100m-1, 75m-2) | Mtr. | 600 |
| 2 | Anchor rope (Static) 9mm | To anchor (20m, 25m and 30m 1 each) | Mtr. | 200 |
| 3 | Harness | Personal safety and rescue to victims | Pcs | 1 |
| 4 | Tubular Webbing (1/2 inch) | making harness, anchor | Mtr. | 100 |
| 5 | Cordelette (Prusik Cord) 7 mm | Making prusik | Mtr. | 120 |
| D. | Others | | | |
| 1 | Hammer (5 Kg) | To make the base | Pcs | 2 |
| 2 | Picket (angle: 4' each) | To make the base | Pcs | 3 |
| 3 | Big knife (Mallet) | To make the base | Pcs | 2 |
| E. | GROUP EQUIPMENT | | | |
| 1 | Boat (NRS) (16') | To rescue the victim | pcs | 2 |
| 2 | Paddles (Standard) | River crossing purpose | pcs | 18 |
| 3 | Slingshot | To cross the rope across the river. | Set | 1 |
| 4 | Kayak set | Rescue Purpose | Set | 2 |
| 5 | Kayak Paddle | Rescue Purpose | Pcs | 2 |
| 6 | Kayak Spray Skirt | Rescue Purpose | Pcs | 2 |
| 7 | Barrel Pump | To pump the boat | Pcs | 2 |
| 8 | Repairing Kit | To maintain the boat | Set | 2 |
| F. | COMMUNICATION EQUIPMENT | | | |
| 1 | Megaphone | Voice Amplification for calling to victims or hailing workers. | Pcs | 2 |
| 2 | Radio Set (Waterproof) | To communicate with each other and to victims | Pcs | 8 |

| SN | Equipment | Purpose | Qty | Unit |
|---|---|---|---|---|
| G. | SAFETY AND MEDICAL EQUIPMENT | | | |
| 1 | Fire Extinguisher, 5-8 kg, dry chemical, Type BC | To extinguish small fires. | Pcs | 2 |
| 2 | Reflector Vest | To identify workers on a site; also increase visibility in low-light or night operation. | Pcs | 10 |
| 3 | Scene tape roll (150 mt) | To secure and identify a work area. | Pcs | 3 |
| 4 | Stretcher | To rescue the victims | Sets | 1 |
| 5 | Sawyer Filter | To provide safe drinking water | Sets | 2 |
| 6 | Sked | To rescue the victims (demonstration) | Pcs | 1 |
| 7 | KED | Immobilizing spinal injured victim to transport using sked | Set | 1 |
| 8 | Emergency Blankets | To warm hypothermia victims from cold | Pcs | 4 |
| 9 | Set of Splint and Bandages | Pre-hospital care for victims | Sets | 2 |
| 10 | Face mask (normal) | Multipurpose | Pkts | 2 |
| 11 | Latex gloves | For medical response | Pkts. | 2 |

# Annex 7: RECOGNITIONS AND PLAQUES


Figure 1 From Fire Service and Civil Defense Bangladesh

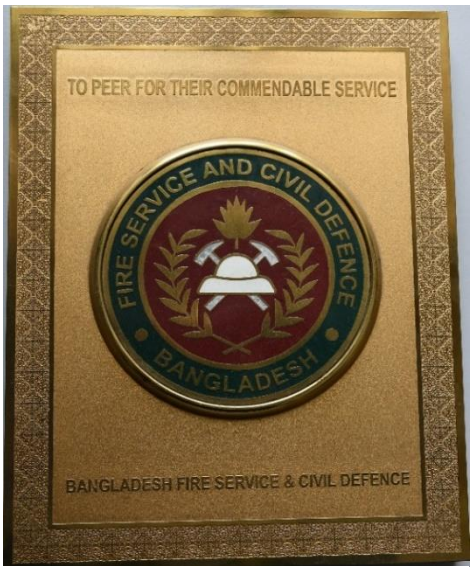



Figure 2 From Fire Service and Civil Defense Bangladesh


Figure 3 From Fire Service and Civil Defense Bangladesh


Figure 4 From Border Security Force (BSF), India


Figure 5 From Central Industrial Security Force (CISF), India


Figure 6 From Jakarta Fire and Rescue, Indonesia


Figure 7 From 118 Emergency Ambulance Service Foundation, Indonesia


Figure 8 From Punjab Emergency Service, Pakistan

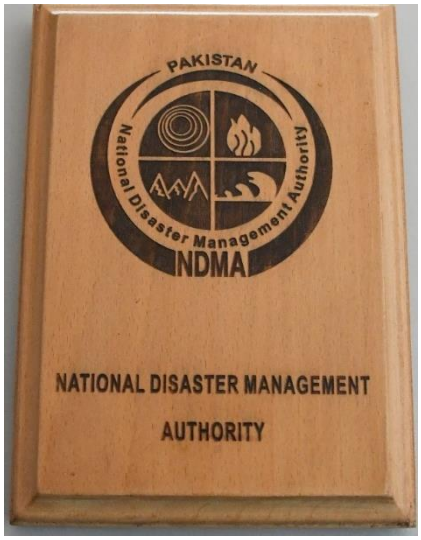



Figure 9 From National Disaster Management Authority (NDMA), Pakistan


Figure 10 From Nepal Police, Nepal

Figure 11 From Nepal Police, Nepal


Figure 12 From Armed Police Force, Nepal


Figure 13 From Armed Police Force, Nepal

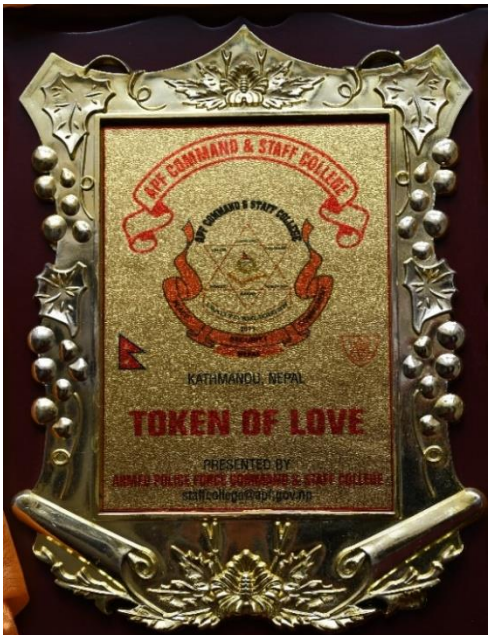



Figure 14 From Armed Police Force, Nepal


Figure 15 From Nobel College, Kathmandu, Nepal

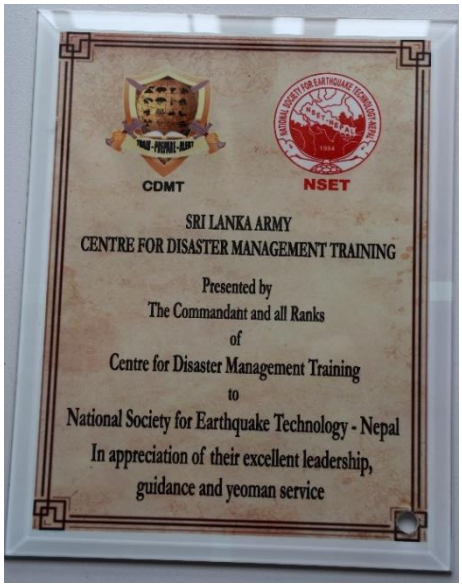
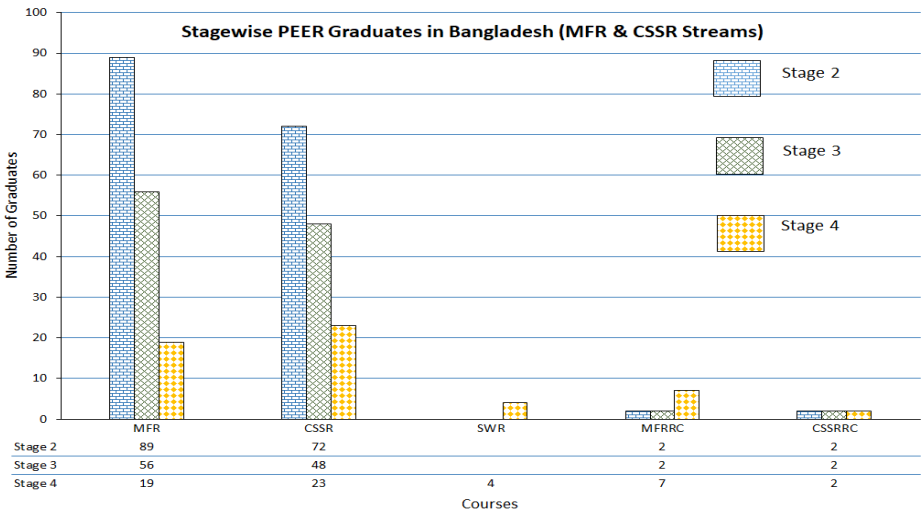



Figure 16 From Sri Lanka Army, Sri Lanka

# Annex 8: COUNTRY SPECIFIC ACHIEVEMENTS

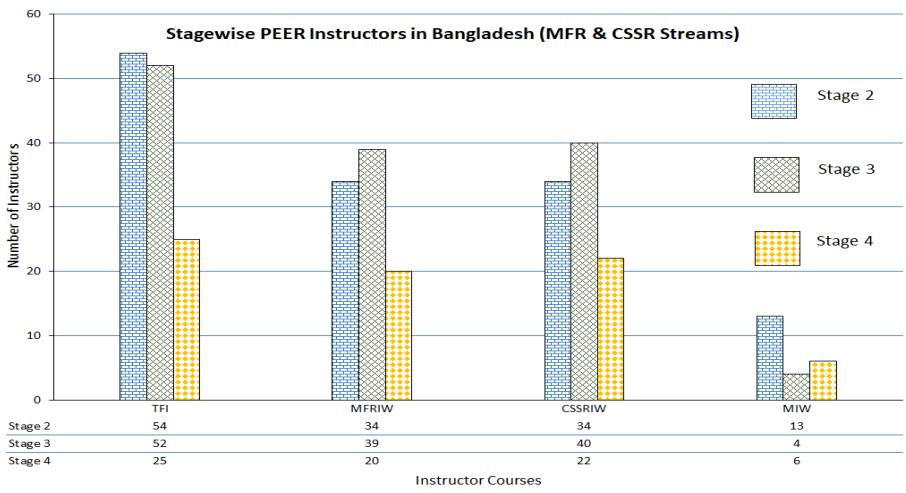
Several countries in Asia have been involved in the PEER program throughout the four stages of PEER. A statistical overview of the PEER graduates and instructors for 6 countries involved in at least two stages of PEER are discussed in this section.

## BANGLADESH




| | MFR | CSSR | SWR | MFRRC | CSSRRC |
|---|---|---|---|---|---|
| Stage 2 | 89 | 72 | | 2 | 2 |
| Stage 3 | 56 | 48 | | 2 | 2 |
| Stage 4 | 19 | 23 | 4 | 7 | 2 |

Figure 1: Bangladesh - MFR and CSSR Stream Graduates




| | TFI | MFRIW | CSSRIW | MIW |
|---|---|---|---|---|
| Stage 2 | 54 | 34 | 34 | 13 |
| Stage 3 | 52 | 39 | 40 | 4 |
| Stage 4 | 25 | 20 | 22 | 6 |

Figure 2: Bangladesh - MFR & CSSR Stream Instructors

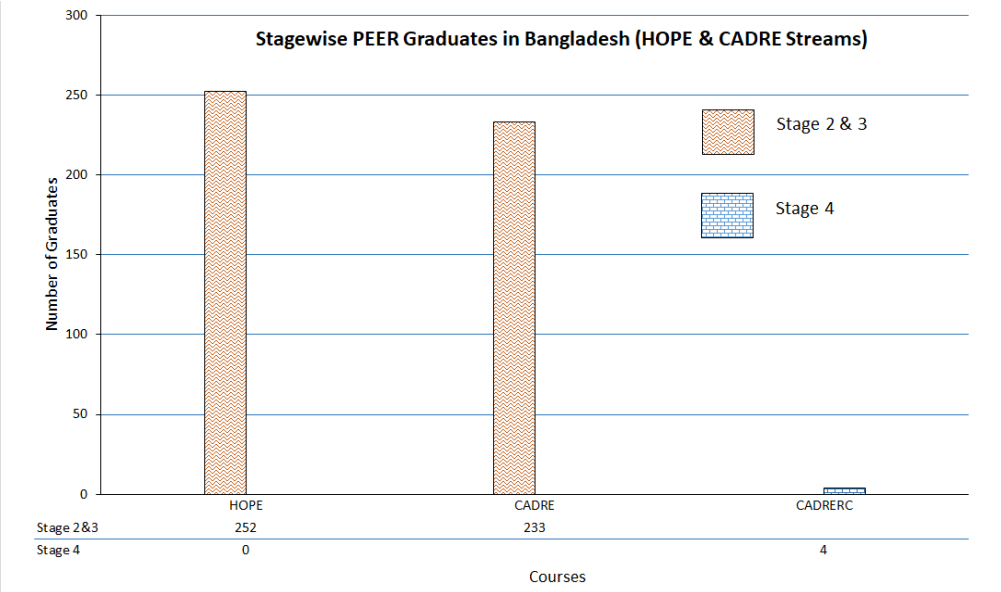



Figure 3: Bangladesh - HOPE & CADRE Stream Graduates

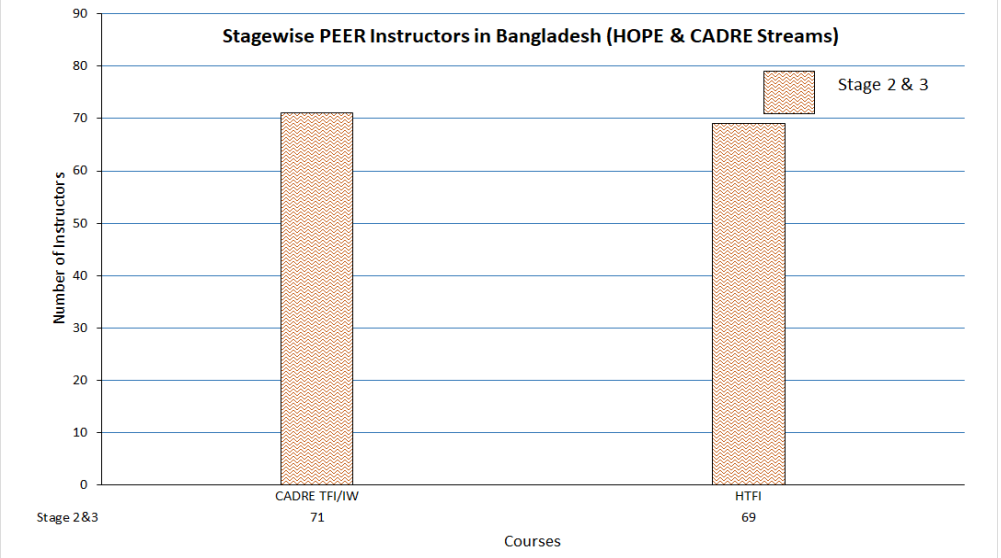
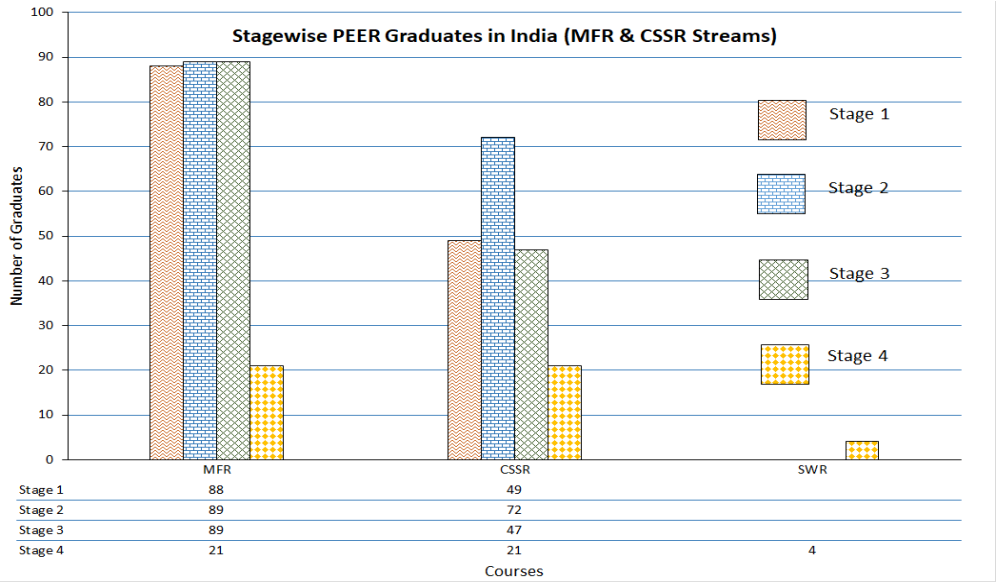


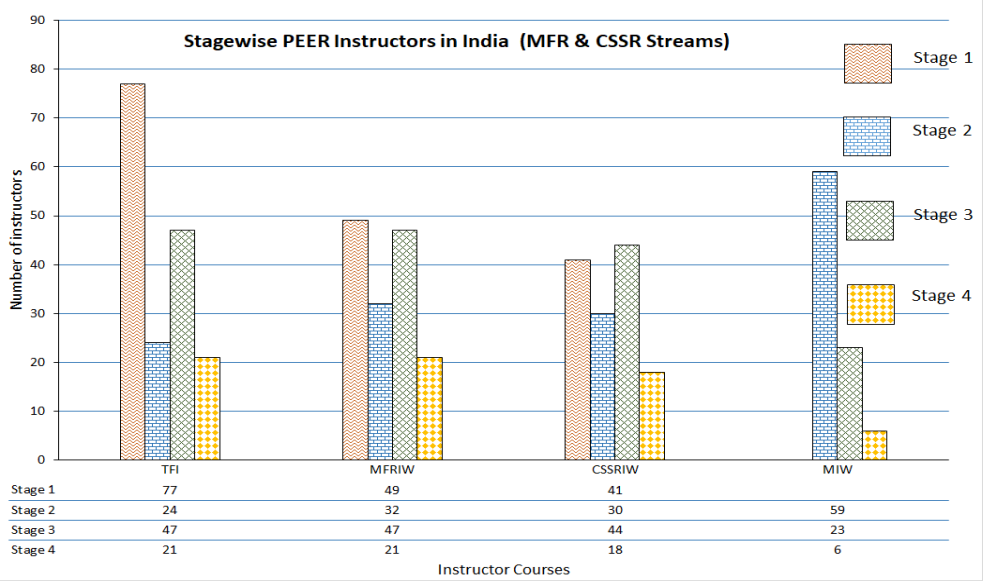

Figure 4: Bangladesh - HOPE & CADRE Stream Instructors

# INDIA




| | MFR | CSSR | SWR |
|---|---|---|---|
| Stage 1 | 88 | 49 | |
| Stage 2 | 89 | 72 | |
| Stage 3 | 89 | 47 | |
| Stage 4 | 21 | 21 | 4 |

Figure 5: India – MFR & CSSR Stream Graduates




| | TFI | MFRIW | CSSRIW | MIW |
|---|---|---|---|---|
| Stage 1 | 77 | 49 | 41 | |
| Stage 2 | 24 | 32 | 30 | 59 |
| Stage 3 | 47 | 47 | 44 | 23 |
| Stage 4 | 21 | 21 | 18 | 6 |

Figure 6: India - MFR & CSSR Stream Instructors

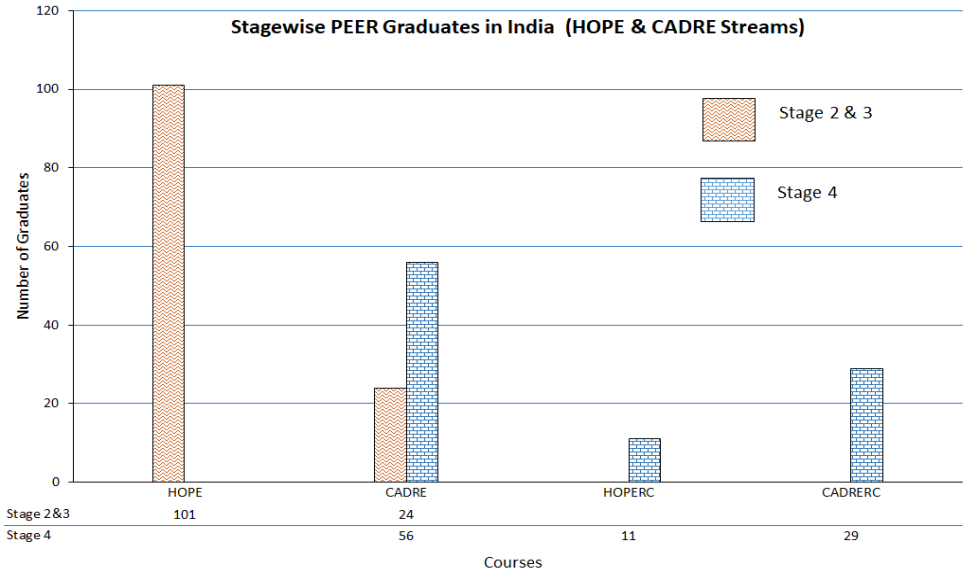



Figure 7: India - HOPE & CADRE Stream Graduates

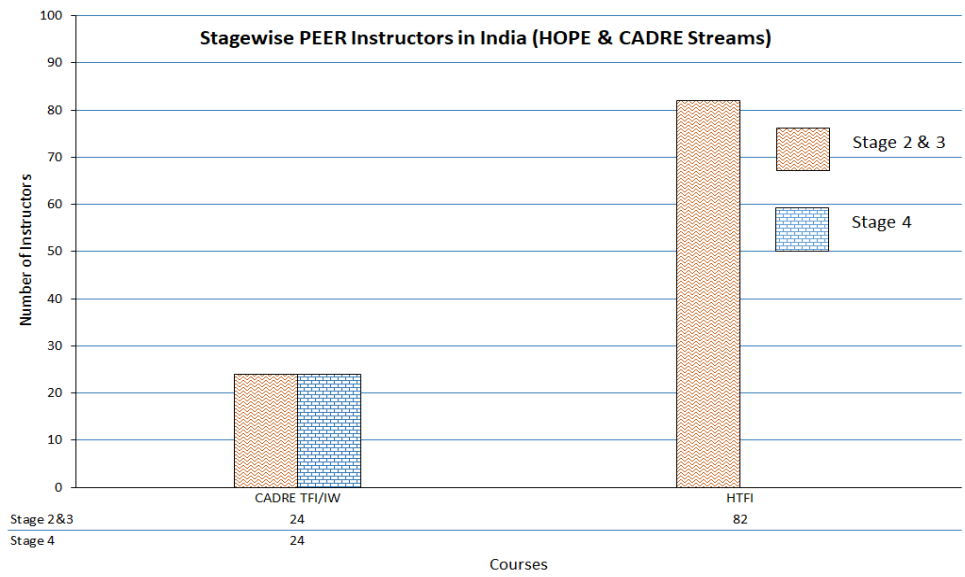



Figure 8: India - HOPE & CADRE Stream Instructors

# INDONESIA

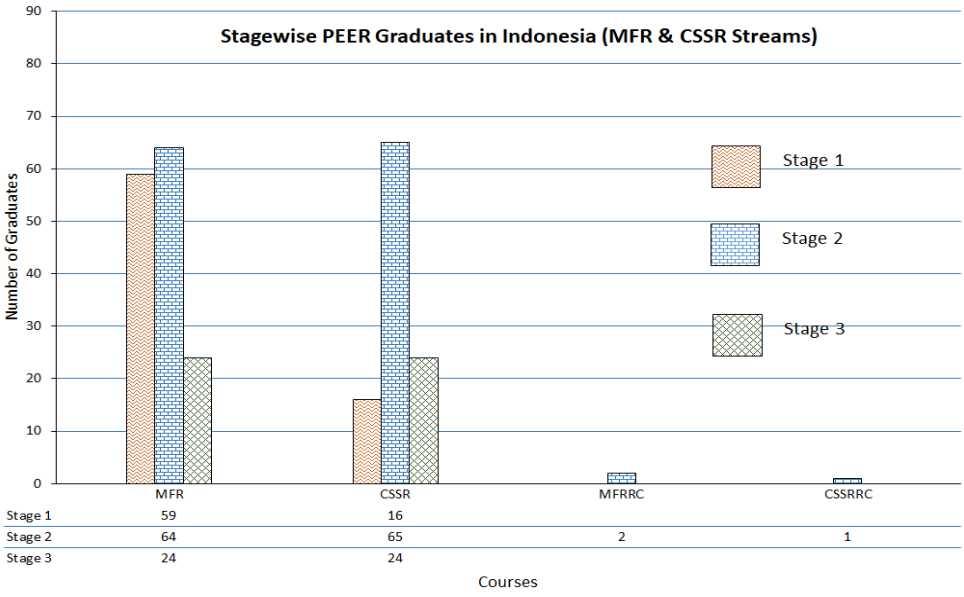



Figure 9: Indonesia - MFR & CSSR Stream Graduates

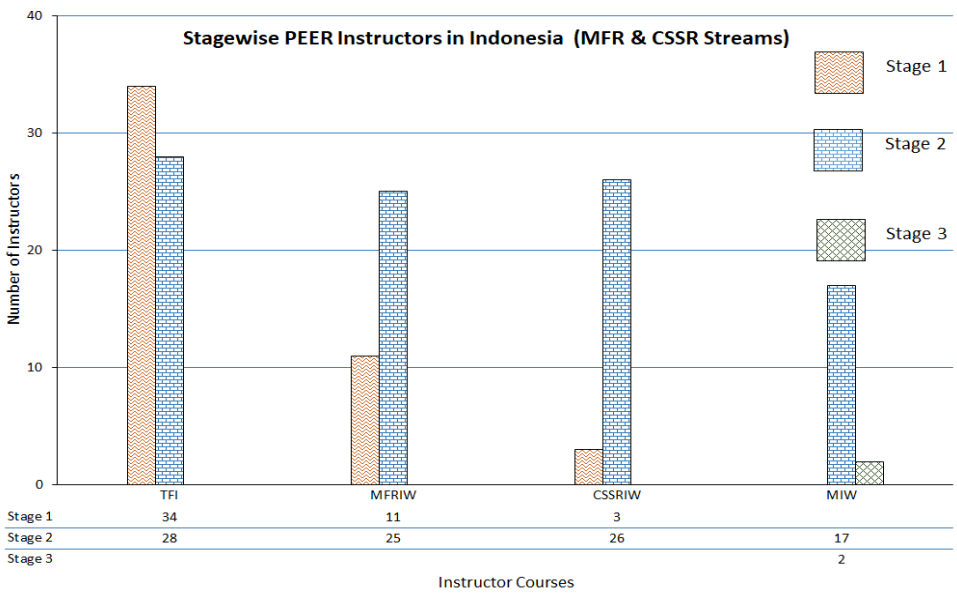



Figure 10: Indonesia - MFR & CSSR Stream Instructors

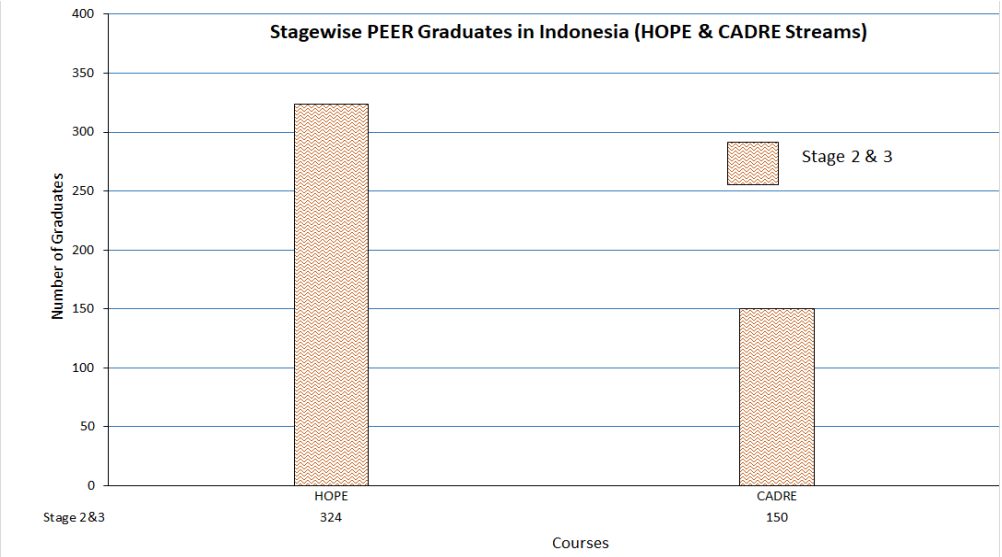



Figure 11: Indonesia - HOPE & CADRE Stream Graduates

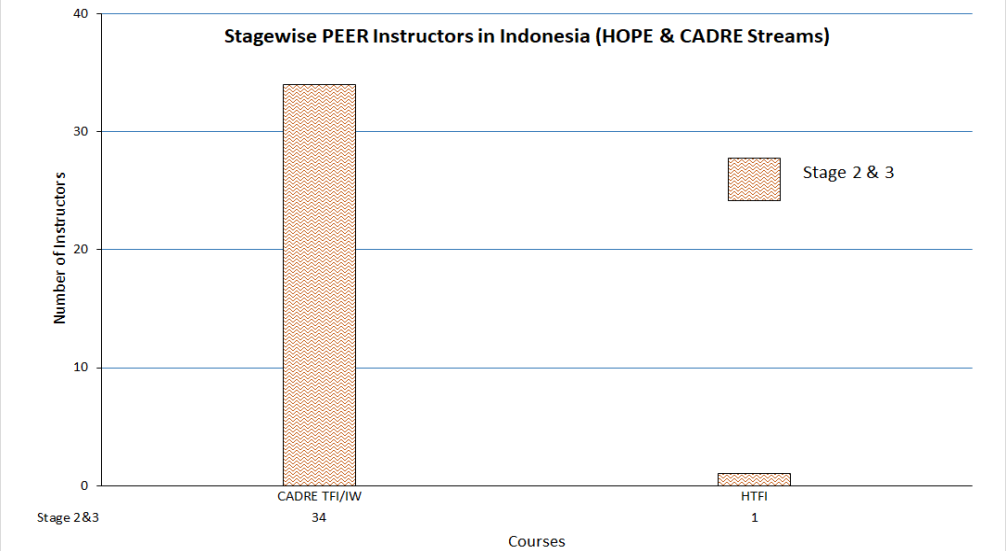



Figure 12: Indonesia - HOPE & CADRE Stream Instructors

# NEPAL

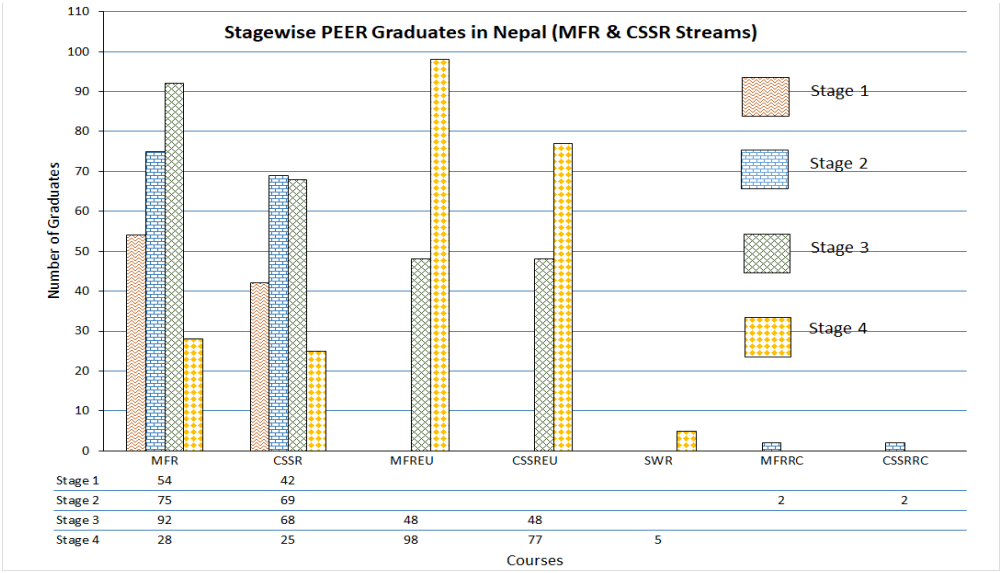



Figure 13: Nepal - MFR & CSSR Stream Graduates

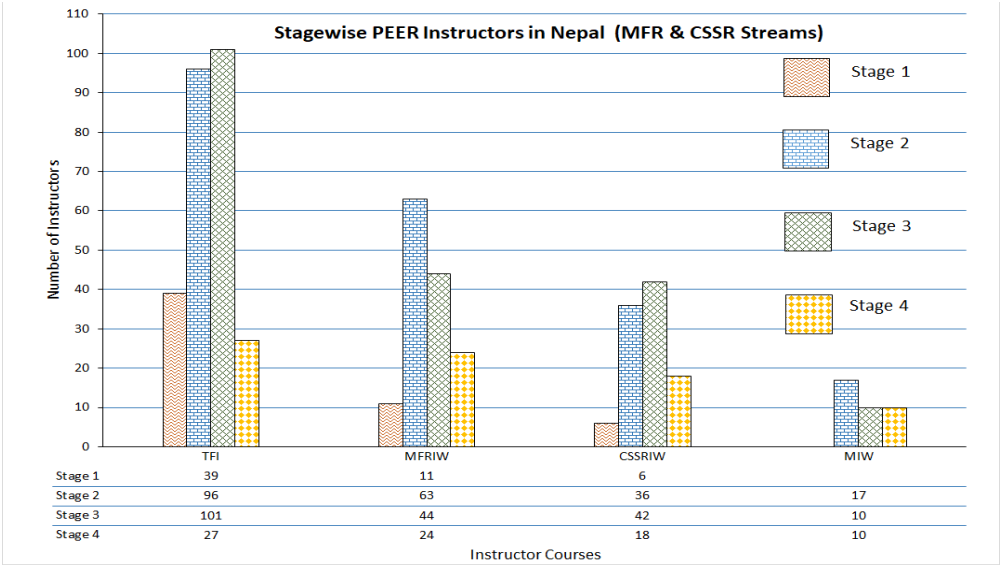



Figure 14: Nepal - MFR & CSSR Stream Instructors

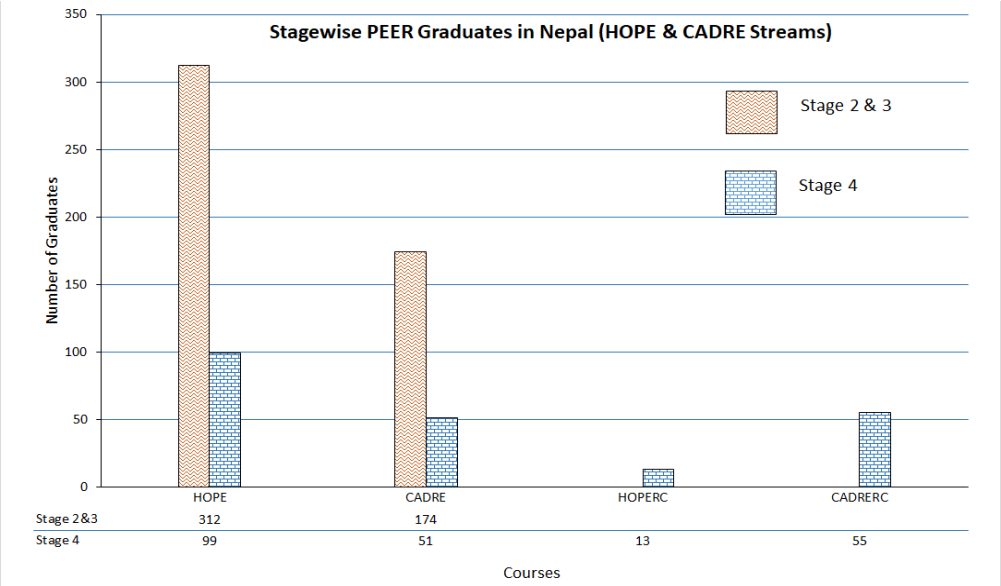



Figure 15: Nepal - HOPE & CADRE Stream Graduates

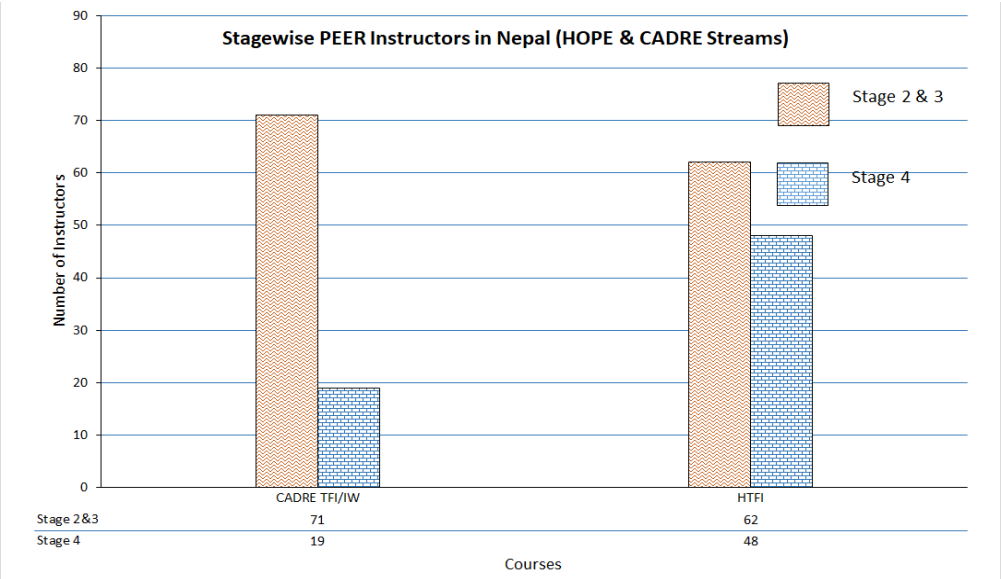



Figure 16: Nepal - HOPE & CADRE Stream Instructors

# PAKISTAN

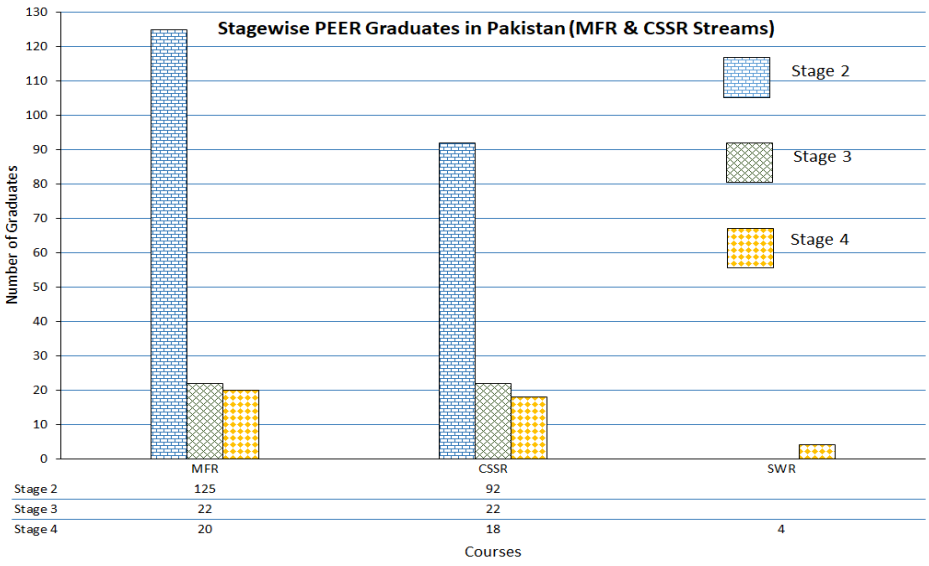



Figure 17: Pakistan - MFR & CSSR Stream Graduates

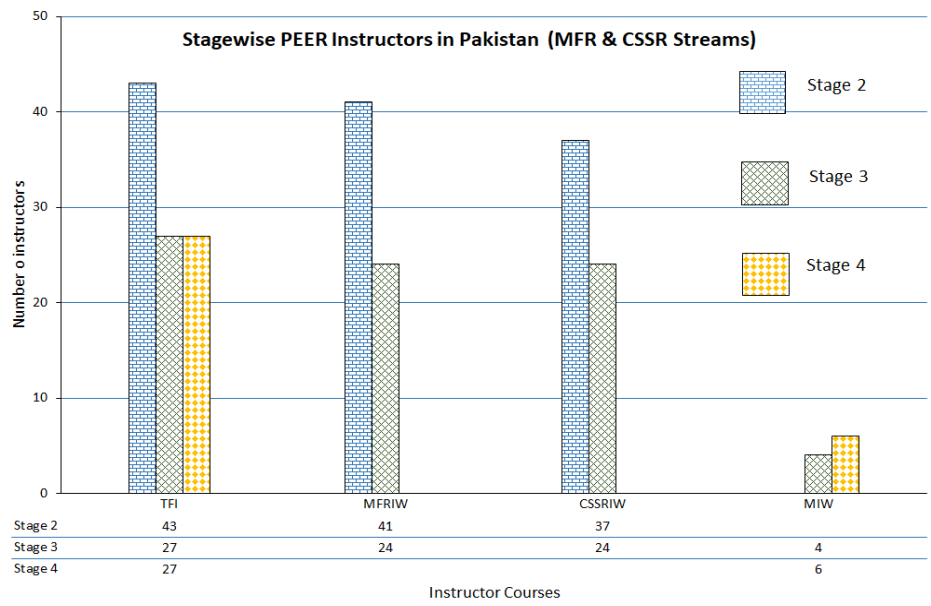



Figure 18: Pakistan - MFR & CSSR Stream Instructors

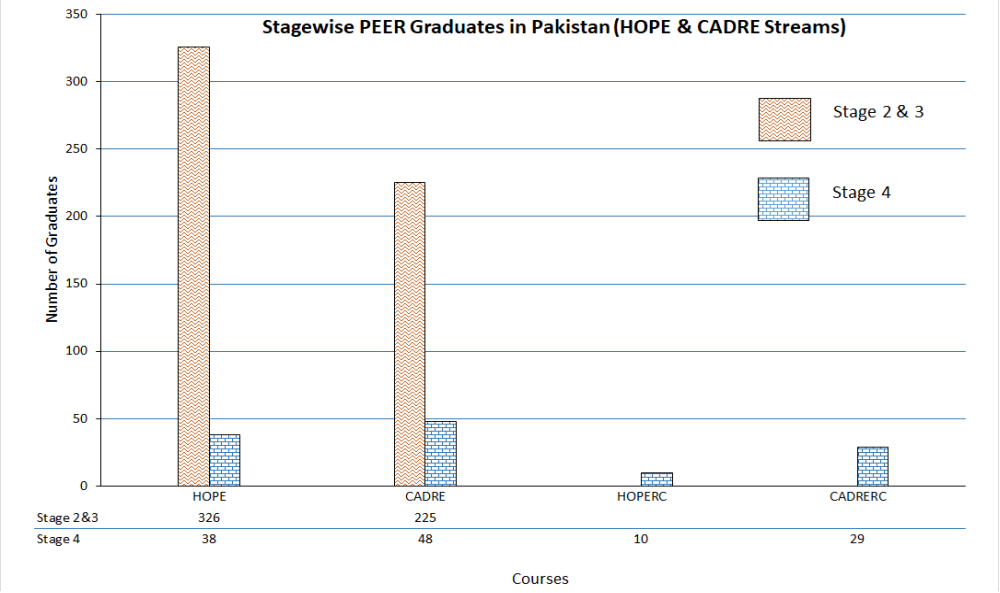



Figure 19: Pakistan - HOPE & CADRE Stream Graduates

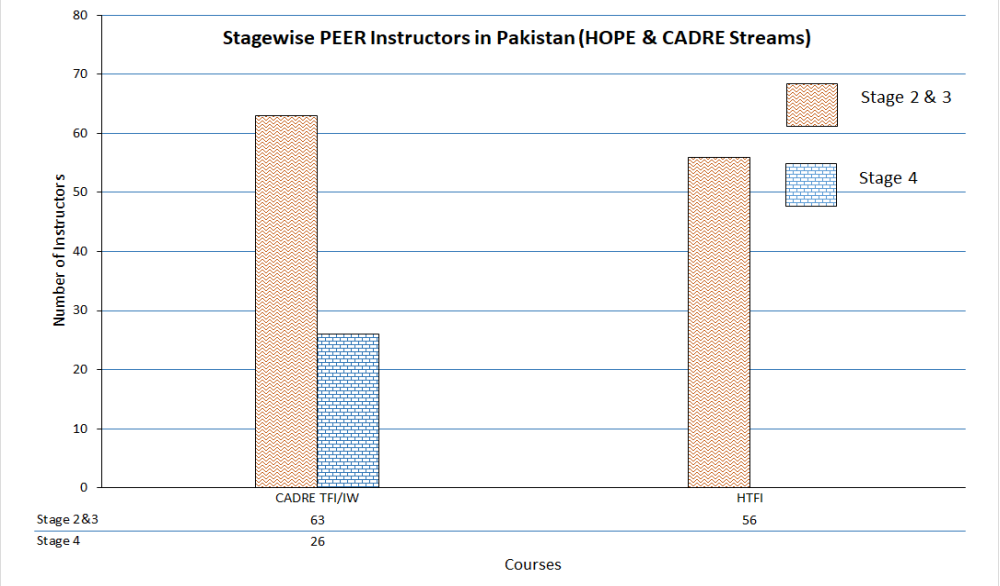



Figure 20: Pakistan - HOPE & CADRE Stream Instructors

# PHILIPPINES

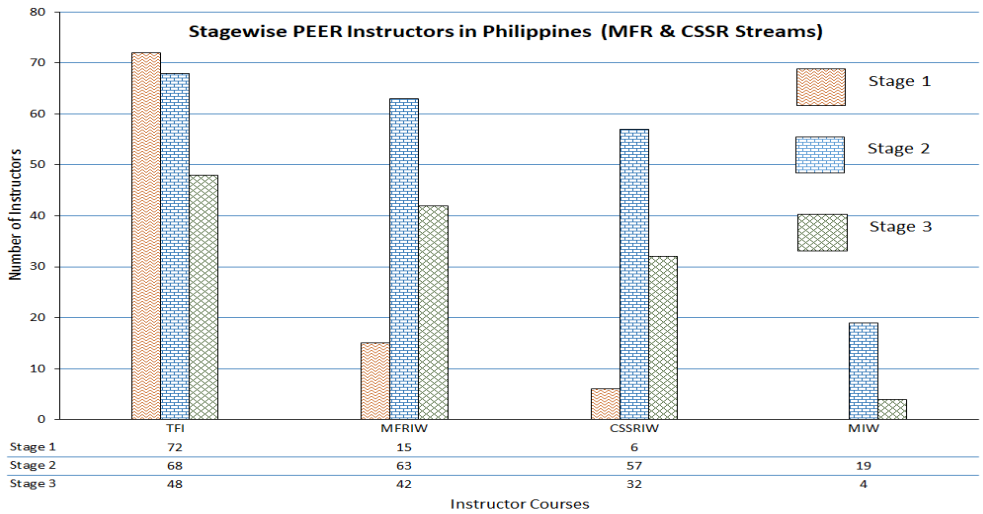



Figure 21: Philippines - MFR & CSSR Stream Instructors

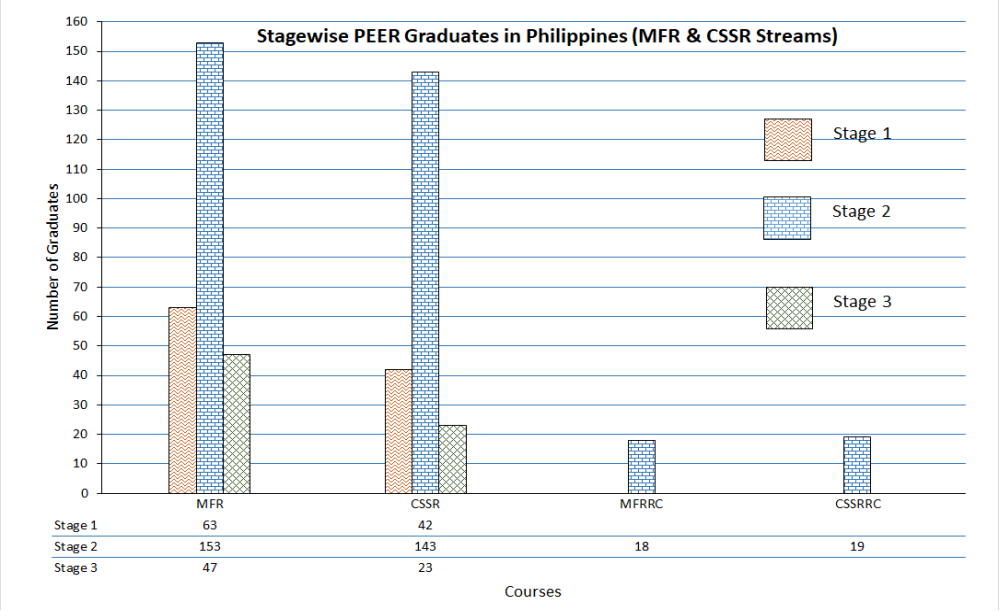



Figure 22: Philippines - MFR & CSSR Stream Graduates

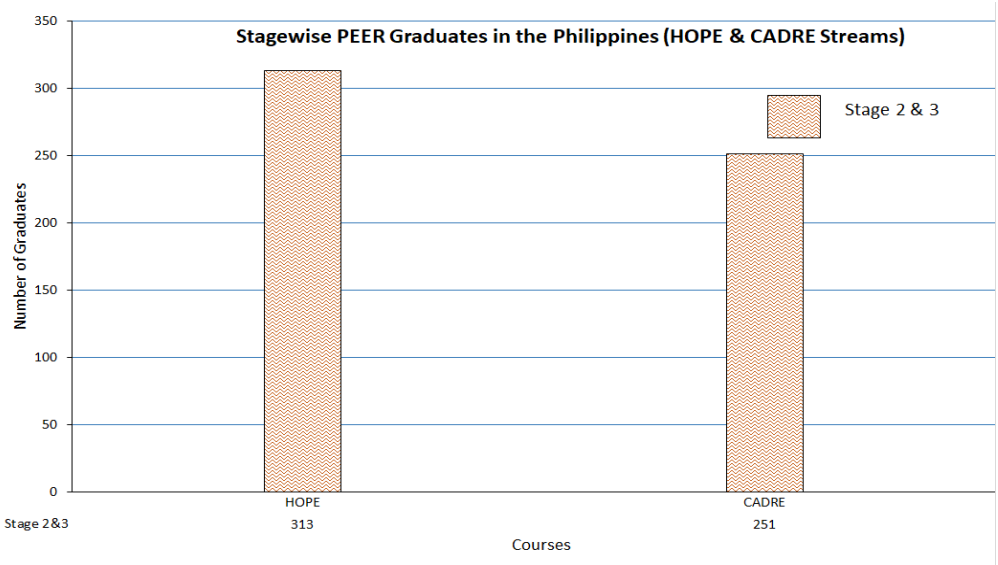



Figure 23: Philippines - HOPE & CADRE Stream Graduates

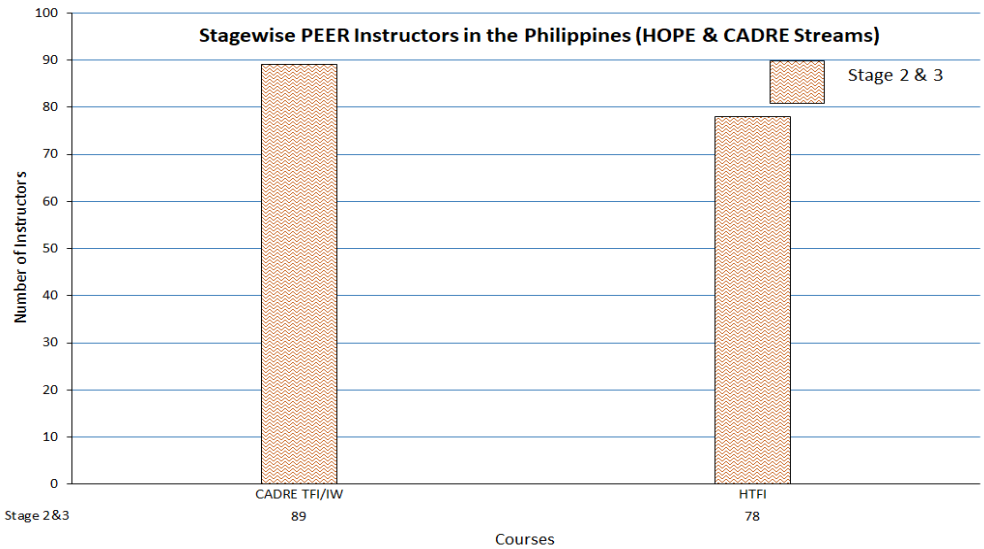



Figure 24: Philippines - HOPE & CADRE Stream Instructors

# Annex 9: PICTURES FROM PEER ACTIVITIES

Figure 1: MFR Course underway in New Delhi, India. March 2002.


Figure 2: First Regional Planning Meeting with participation of high-level officials from PEER countries. New Delhi, India, September 2003


Figure 3: Regional Networking Meeting attended by Bangladesh, India, Indonesia, Nepal and the Philippines in Hyderabad, India. April 2006.


Figure 4: Country Planning Meeting, Jakarta, Indonesia. September 2005.


Figure 5: Country Planning Meeting, New Delhi, India. January 2006


Figure 6: Country Planning Meeting, Kathmandu, Nepal. January 2007.


Figure 7: Country Planning Meeting, Islamabad, Pakistan. February 2007.


Figure 8; Country Planning Meeting, Quezon, Philippines. September 2006.

Figure 9: CSSR Graduate, 2015 Gorkha Earthquake


Figure 10: MFR Course, Pakistan, 2016

Figure 11: Regional SWR Course, Trishuli River, Nepal, 2018

# Annex 10: PEER Stage V External Evaluation (Draft Report)

Submitted to:


National Society for Earthquake Technology – Nepal (NSET)

and


USAID/OFDA

Prepared by:

Dr. Rebekah Paci-Green, External Consultant

September 30, 2021

## Executive Summary

This document is the external evaluation of the Program for Enhancement of Emergency Response (PEER) Stage 4 carried out from 2014 to 2020. The evaluation included a review of PEER documents, analysis of the PEER course database, and 22 semi-structured interviews with Key Informants in Bangladesh, India, Nepal, and Pakistan. Because of the COVID-19 pandemic, interviews were held virtually, recorded and transcribed for analysis.

PEER is a program that develops high-quality emergency response training programs to enhance the capacity of South and Southeast Asian countries in emergency response. PEER basic courses, each of which is supported by a set of instructor development courses, include:

- Medical First Responder training (MFR), 13 days;
- Collapsed Structure Search and Rescue training (CSSR), 8 days;
- Hospital Preparedness for Emergencies training (HOPE), 4 days;
- Community Action for Disaster Response training (CADRE), 4 days; and
- Swift Water Rescue training (SWR), 5 days.

## Findings

Since its inception, PEER training has resulted in 6,289 graduates of MFR, CSSR, HOPE, CADRE, and SWF basic and associated instructor training sequences. At the same time, PEER has donated important life-saving equipment to partner organizations. Specifically, PEER 4 has resulted in a new Swift Water Rescue course and online refresher courses. However, these training statistics *vastly underestimate* PEER's influence in the region.

PEER Stage 4 focused on consolidation, especially the institutionalization of PEER courses within partner organizations. By this measure, PEER has made remarkable achievements. Most MFR and CSSR partner organizations had integrated these PEER courses into their regular training program. HOPE partner organizations were engaging with Ministries of Education and university leaders to integrate training into health worker curriculum; this integration had already taken place at Nepal's Tribhuvan University. Red Cross and Crescent Societies regularly taught or had integrated CADRE into their training programs.

Even beyond this remarkable institutionalization, PEER graduates were shaping disaster response and readiness in society. PEER graduates were training private industry, huge numbers of community volunteers in Bangladesh and Pakistan, and engaging youth in disaster preparedness and response in primary and secondary

schools. These tertiary impacts are significant and align with a whole community approach to disaster response.

PEER has also formed an important in-country and regional network of trained disaster response personnel. Those with direct or institutionalized PEER training have a common set of terminology and a common approach to managing decision-making during response. Moreover, regional trainings and sharing of regional instructors has built important professional relationships and a broader trust across organizations and countries. Those exposed to PEER training note that they are much better able to coordinate response as peers.

PEER impact is also notable in creating better disaster response and reducing disaster mortality in South Asia. CADRE trained community volunteers in multiple countries are now able to initiate response and coordinate directly with paramilitary and security forces when they arrive. MFR and CSSR trained responders have vastly increased their capacity to successfully extract and stabilize survivors of building collapse, flood, and earthquake events. Community trust in the Fire Service has increased substantially in Bangladesh due to FSCD's increased effectiveness in responding. The coordinated response to the Gorkha earthquake in 2015 showed how fundamental PEER has been in reducing disaster mortality thru better disaster response. Multiple organizations in Nepal and India noted that PEER training ensured smooth response coordination and resulted in lives saved.

## Key Informant Assessment of Program Objectives

Key Informants rank NSET's ability to meet PEER 4 program indicators highly, including NSET's ability to 1) Enhance capacity of PEER country partnering organizations through standardized training courses (Avg: 7.95, Range: 5 to 10); 2) Institutionalize PEER courses in the partnering institutions (Avg: 6.5, Range: 3.5 to 10), and 3) Strengthened coordination and sharing among emergency response organizations in South Asia (Avg: 6.7, Range: 3.5 to 10).

## Recommendations

Notwithstanding these notable successes, South Asian capacity in disaster response remains somewhat precarious. Some partner organizations still rely upon PEER instructor training and have not fully built capacity to maintain sufficient instructors, especially the most senior instructors. Turnover at the Nodal Agencies is also a challenge, with new decision makers needing to be educated on the importance of response readiness and the need to fully fund it. PEER has functioned as institutional memory and advocate for national investment in disaster response readiness. That function is likely to still be needed for some time.

National and regional risks are also changing, and with it the need for new training. Climate change, urbanizations, and industrialization are raising exposure and vulnerability around wildfire and chemical, biological, radiological and nuclear (CBRN) accidents. On a sub-national scale, flood rescue and advanced mountain rescue are also needed. Because of the high-quality response training the PEER has provided, Partner Organizations are increasingly aware of response capacities they do not yet have. Yet, an important tension exists between, disseminating existing PEER courses more broadly -- especially HOPE, CADRE and SWF – and developing new courses. New course development will need to avoid siphoning resources needed to maintain and, in some cases, expand coverage of existing PEER courses.

This external evaluation finds that a regional disaster response readiness platform is needed in South Asia, whether it be an extension of PEER or something new. This response readiness platform would benefit from initial external donor support but should be strategically planned for a gradual handover to full regional funding by partner countries of South Asia.

A continuation of PEER or a new regional disaster response readiness platform should consider:

- Diversifying instruction modalities.
- New forms of regional collaboration.
- shifting towards an accreditation role.
- New course development through support of partner organizations
- Hospital readiness recognition.
- Regional Memoranda of Understandings for Mutual Aid.
- National investment in instructor training, research, and development.

## Evaluation Purpose and Questions

This document is the external evaluation of the Program for Enhancement of Emergency Response (PEER) Stage 4 carried out from 2014 to 2020. The purpose is to provide a comprehensive external evaluation of the project and assess how well it has achieved the goals of the program laid out by USAID/OFDA and internal program implementation goals laid out by NSET. Please see Statement of Work (SOW) for further details.

## Project Background

PEER is a program that develops high-quality emergency response training programs to enhance the capacity of South and Southeast Asian countries in emergency

response. The ultimate PEER program goal is to reduce mortality from disasters in the region.

The program, initiated and funded by the USAID/OFDA in 1988, has completed four stages:

| Stages | Years | Implementer | Key Activities | Objectives | Countries |
|---|---|---|---|---|---|
| PEER 1 | 1998-2002 | ADPC | Partnership, stakeholder development; curriculum development for MFR and CSSR; development of regional instructors | • Establish PEER foundation in Asia<br>• Curriculum development and adaptation<br>• Instructor training | IND, IDN, NPL, PHL |
| PEER 2 | 2003-2008 | NSET/ IRG | MFR and CSSR implemented in country; national instructors developed | • Emergency response training<br>• Institutional strengthening<br>• Networking and Coordination | BGD, IND, IDN, NPL, PAK, PHL |
| PEER 3 | 2009-2014 | NSET/ ADPC | Continued MFR and CSSR; Refresher courses developed CADRE developed | • Strengthening capacity in MFR and CSSR (NSET Implementation) | BGD, IND, IDN, NPL, PAK, PHL |
| PEER 4 | 2015-2019 | NSET | Continued MFR, CSSR, and CADRES;<br>SWR developed | In-country ownership and adaptation | BGD, IND, NPL, PAK |

Source: Brochure PEER_IV_2018_3.pdf

Through these four stages, PEER has developed and implemented a set of high-quality training for national security and emergency response forces; national Red Cross/Crescent societies; and other organizations with mandates related to reducing disaster mortality. The PEER basic courses to date include:

- Medical First Responder training **(MFR)**, 13 days;
- Collapsed Structure Search and Rescue training **(CSSR)**, 8 days;

- Hospital Preparedness for Emergencies training **(HOPE)**, 4 days;
- Community Action for Disaster Response training **(CADRE)**, 4 days; and
- Swift Water Rescue training **(SWR)**, 5 days.

These are supported by a set of instructor development courses focused on course delivery and adult education methods, as well as in-depth course-specific content. Three types of courses support MFR and CSSR --Training for Instructors **(TFI)**, Instructors' Workshops **(IW)**, and Master Instructor Workshops **(MIW)** that trains participants in course coordination and management. HOPE has a single Training for Instructors course **(HOPE-TFI)** and, likewise, CADRE has a single instructor development course that combines instructor training and in-depth instructor training in the content **(CADRE TFI and IW)**. No instructor development course is yet available for SWR. Please see Appendix B-

# Annex 11: STATEMENT OF WORK (SOW)

## Job Summary:

The Monitoring and Evaluation (M&E) Consultant will be responsible for the stated duties and responsibilities in connection with the external evaluation process of the Program for Enhancement of Emergency Response (PEER) Stage 4 (2014-2020).

## Main Task:

He/She shall evaluate the achievements and implementation of the PEER Stage 4 managed by NSET in the beneficiary countries; provide NSET with a comprehensive evaluation report of project results to date; and an assessment of the status of program implementation as per USAID/OFDA and NSET requirements.

## Specific Activities:

The M&E Consultant shall be based in Kathmandu, Nepal, with travel to the program's core beneficiary countries (Bangladesh, India, Nepal, Pakistan), for the duration of the work assignment, and shall perform the duties as warranted for by USAID/OFDA and NSET requirements, PEER scope and activities, including, but not limited to the following:

a. Conduct field site monitoring visits, surveys, interviews and prepare report on findings
b. which will include but not limited to:

   - Progress against targeted outputs
   - Impacts/successes/achievements, identification of key gaps/issues/ challenges and
   - lessons learned
   - Documentation of course of action/strategies/implementation changes made
   - Recommendations for remaining project term and vision beyond 2020.

c. Proper collection, recording, analysis, reporting and documentation of process and results using standard tools as approved by NSET.
d. Perform qualitative and quantitative data analysis and generate reports (with infographic, charts, maps, etc.).
e. Ensure that statistical monitoring reports are generated accurately and reflect the status of progress towards reaching the program targets, and are submitted in a timely manner to NSET and USAID/OFDA;

f. Perform other duties as determined by the NSET Executive Director/PEER Chief of Party and/or USAID/OFDA as needed.
g. Prior to commencement of the M&E process, the Consultant will submit an evaluation plan/workplan reflecting the approach and methodology, travel plan and an extended outline of the M&E report. He/She will commence the job after approval of the evaluation plan/workplan.

## Deliverables

The following is a set of evaluation deliverables, with the expected timing of each adhering to the above Evaluation Timeline.

1. An evaluation plan containing the proposed evaluation outline; the evaluation methodology, including draft data collection instruments; and an implementation schedule, to be delivered before the arrival of the Consultant in Nepal/before joining the team. Draft data collection tools shall be submitted for review and feedback by NSET.
2. An in-briefing/ presentation with NSET upon the Consultant's arrival in Nepal/joining the team.
3. A PowerPoint presentation to USAID/OFDA (and another to senior NSET management) of the preliminary findings, conclusions, and recommendations of the evaluation, for correction of errors of fact or interpretation, to be delivered within 7 weeks of the Consultant's arrival in Nepal/joining the team.
4. A draft evaluation report of not more than 25 pages in length, single-spaced in Gill Sans 11-point font, excluding annexes, with an executive summary of not more than
5. 2 pages in length, within 9 weeks of the Consultant's arrival in Nepal/joining the team.
6. A final evaluation report of not more than 25 pages in length, single-spaced in Gill Sans 11-point font, excluding annexes, with an executive summary of not more than
7. 2 pages in length, within 10 working days of receipt of consolidated comments in electronic format from NSET and USAID/OFDA.
8. All the quantitative data collected as part of this evaluation must be submitted as non-proprietary, machine-readable files to NSET and USAID/OFDA.

# Annex 12: LIST OF PEER TRAININGS AND IMPLEMENTING PARTNER.

## Objectives and Indicators of PEER 4

The **overarching goal** of PEER over the last two decades has been to reduce disaster mortality in South Asia. This evaluation focuses specifically on PEER Stage4, specifically on evaluating the degree to which PEER 4 was able to achieve its primary objective to:

**PEER 4 Objective:** Work with South Asian countries to take ownership of, extend and adapt the program through their own in-country institutions and regional networks. In addition to MFR and CSSR courses, CADRE, HOPE, and SWR training will be provided and further adapted to national contexts (Brochure PEER 4, p4.)

In Stage 4, PEER began shifting focus from developing and providing courses to supporting implementing organizations in the institutionalization of these courses within their own skills acquisition programs and processes.

Internally, PEER 4 identified **three major program indicators** they sought to monitor and achieve. These were:

- IR 1 – Enhance capacity of PEER country partnering organizations through standardized training courses
- IR 2 – Institutionalization of PEER Courses in the partnering institutions
- IR 3 – Strengthened coordination and sharing among emergency response organizations in South Asia

## Evaluation Methods and Limitations

The PEER Stage 4 evaluation used a mixed-methods approach that included semi-structured interviews, review of PEER documents, analysis of the PEER course database, and a review country hazard exposure and risk.

- **Review of PEER Stage IV Documents**. NSET provided the evaluator with PEER Country Reports, past M&E reports, brochures, and the PEER IV monitoring and evaluation plan. A list of PEER acronyms was also provided, and essential. Stage IV objectives shaped the focus of interviews and analysis.
- **Analysis of the NSET-hosted PEER database.** The database of courses offered -- including information on where, when, how many participants, funding – was reviewed. Information was downloaded into Excel to allow for better filtering and establishment of country-level activities and patterns.

- **Exploration of disaster history.** The EM-DAT international disasters database, compiled by the Centre for Research on the Epidemiology of Disasters (CRED) and available at www.emdat.be, was queries to extract information on historical disasters from 1990-2020 t for Bangladesh, India, Nepal, and Pakistan.
- **Semi-Structured Interviews.** The primary means of evaluation was interviews with key personnel in nodal agencies, partner organizations, and the in-country consultants in Bangladesh, India, Nepal, and Pakistan.

  All interviews followed a semi-structured interview schedule, found in Data Collection Instrument. The interview schedule mixed questions aimed at understanding how PEER courses were implemented and questions probing how PEER courses had influenced or shaped activities, skills, and capacity in each country. These schedules were shared with PEER staff at NSET; however, no substantial changes were made based upon this sharing. As such, the evaluation remained independent.

  In total, 22 virtual interviews were conducted, see Persons and Organizations Interviewed. Each interview lasted from 1.5 to 2 hours. The interviewee(s), evaluator, and assistant, NSET M&E specialist, and NSET IT support attended each meeting. After introductions, NSET staff turned off cameras and only the interviewee and evaluator spoke. All interviews were recorded, with consent. Recording was transcribed in full. Transcripts of the interviews were compiled into an Excel database to assist in identifying major themes, commonalities, and differences.

## Limitations

The evaluation of PEER Stage 4 faced significant challenges due to the COVID-19 pandemic, though many were successfully mitigated. At initiation, countries in South Asia were in lockdown or severely limiting international travel and vaccines were not yet developed.

In-person interviews and meetings were shifted to virtual meetings. Further, the timeline for evaluation was extended from three months to just over a year. This extension helped accommodate the needs of the interviewees and NSET staff, many of whom were directly involved in pandemic response and/or fell ill due to the virus. Recording and transcription of interviews also helped mitigate the impact by creating a rich and detailed account of the interviews, more so than traditional notes, and help information remain fresh despite the longer evaluation timeline.

A virtual evaluation does create limitations. The evaluator was not able to see training centers and equipment used or verify the quality of the training environment. The evaluator could not experience the brief encounters or informal introductions with trainers and graduates that can happen during on-site interviews.

Additionally, body language and meaning are more difficult to decipher in a virtual setting. Virtual interviews are more cognitively exhausting, especially across multiple English accents and idiomatic uses of the language. As such, interviewees may have felt less skilled at understanding and responding to the questions; all may have had more difficulty creating rapport.

Furthermore, an evaluation of a program using interviews and document review has limitations. While such methods offer a swift and focused approach, interviews strongly favor self-reported behavior and opinion. As such, this evaluation should be understood as an analysis of how Key Informants of PEER Stage 4 understand the program's strengths and limitations and how they want outsiders to view their contributions or lack thereof. The evaluation should be read alongside internal organizational monitoring and evaluation documents, which is better suited to document course records, test scores, graduate numbers, and cost sharing.

## Evaluation Findings

The external evaluation began with a brief review of major disaster statistics in each country. The global EMDAT database was used to identify major disaster types and trends in deaths and injuries from 1990-2020. While the EMDAT database is most likely not as accurate as in-country disaster statistics, EMDAT uses a consistent methodology across all countries, allowing for better comparison.

Figure 1 shows a breakdown of disaster types in each country from 1990-2020. By far, the greatest disaster risk (counted in EMDAT as events causing four or more deaths and reported in the news) is transportation accidents. Cyclone storms and floods dominate Bangladesh's risk profile. Floods and landslides are prominent in Nepal's risk profile and floods also feature prominently for Pakistan, though earthquakes are also notable. India, being a large and diverse country, has a range of events that span technological and natural hazards. Epidemic losses appear among the top killers in Nepal and Bangladesh.

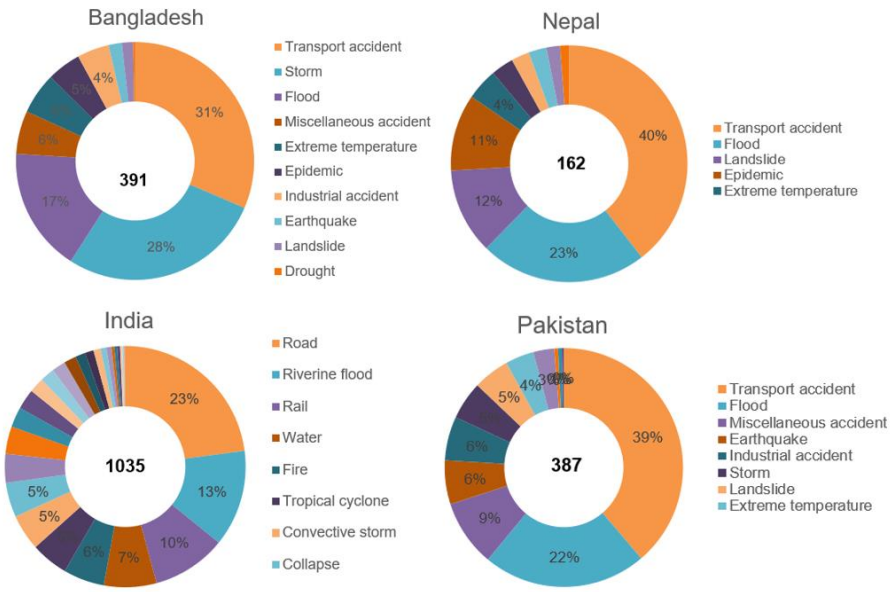
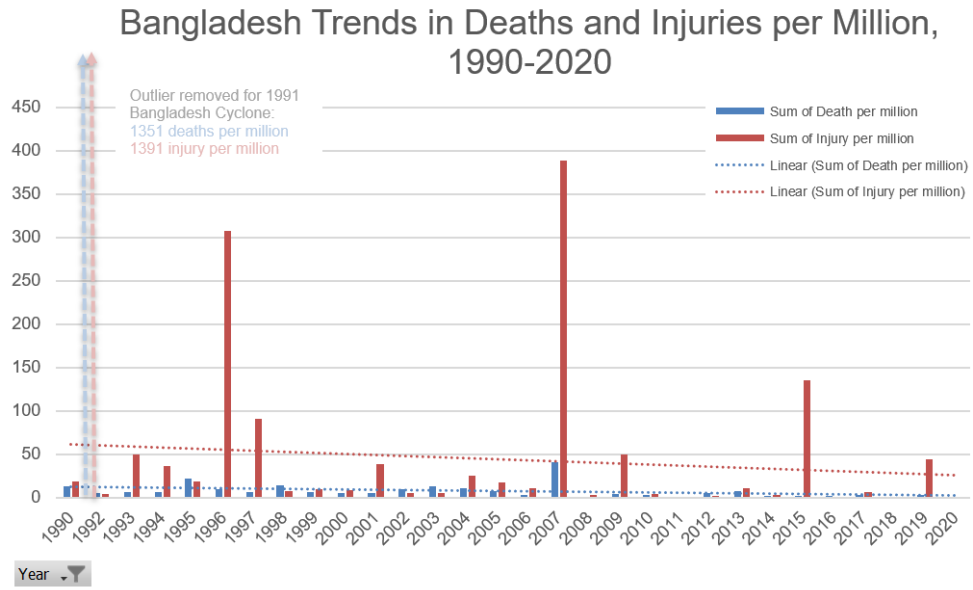
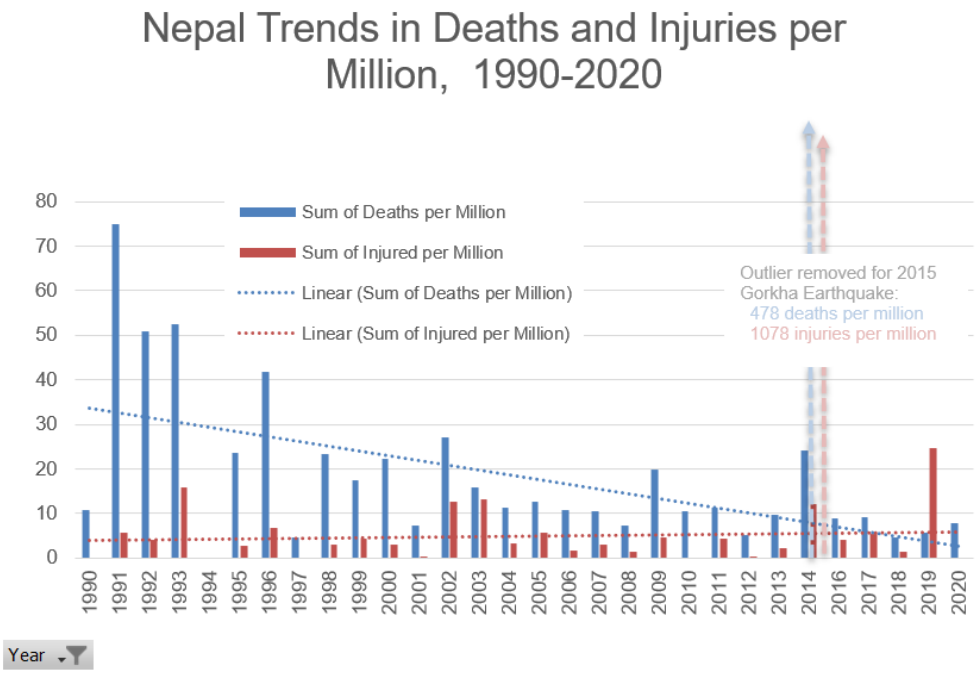
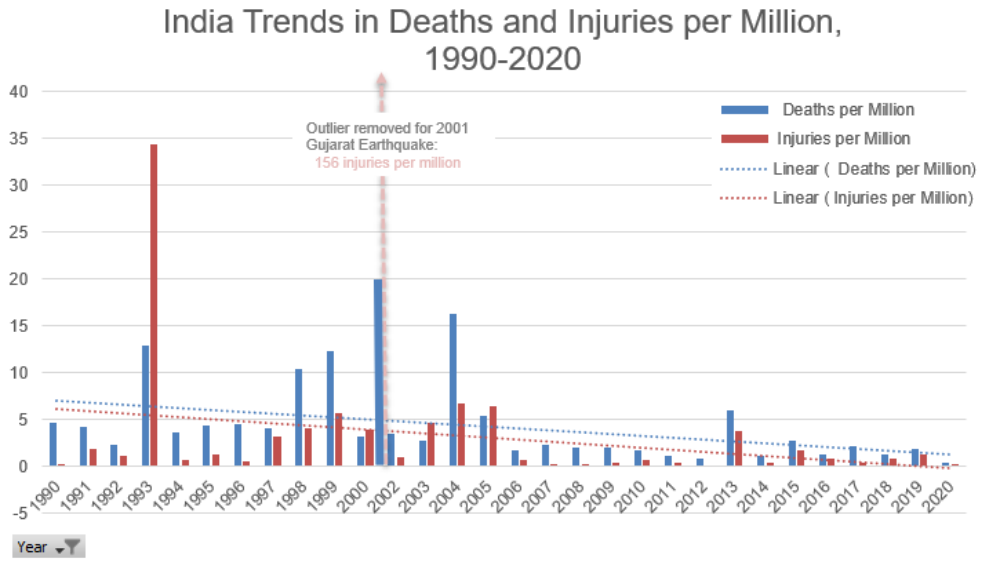



Figure 1. Breakdown of historical disasters by type and country (Source: EMDAT)

Figures 2 show trends in deaths and injuries over the last three decades. Note that major catastrophic events were removed from trendlines to better visualize a general trend of reduced deaths and injuries in the region. Across all four countries, deaths in most events have decreased since 1990. In all countries but Pakistan, injuries have also decreased. Each country has had one to two major catastrophes where deaths and injuries per million far exceeds other years. Overall, these trends suggest that PEER and other changes are supporting better disaster response. However, large, catastrophic events point to need for enhance regional coordination and mutual aid. Such mutual aid can provide the surge capacity that each individual country cannot staff internally.


Bangladesh Trends in Deaths and Injuries per Million, 1990-2020
Outlier removed for 1991 Bangladesh Cyclone:
1351 deaths per million
1391 injury per million
Sum of Death per million
Sum of Injury per million
Linear (Sum of Death per million)
Linear (Sum of Injury per million)
450
400
350
300
250
200
150
100
50
0
1990 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020
Year


Nepal Trends in Deaths and Injuries per Million, 1990-2020
Sum of Deaths per Million
Sum of Injured per Million
Linear (Sum of Deaths per Million)
Linear (Sum of Injured per Million)
Outlier removed for 2015 Gorkha Earthquake:
478 deaths per million
1078 injuries per million
80
70
60
50
40
30
20
10
0
1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2016 2017 2018 2019 2020
Year



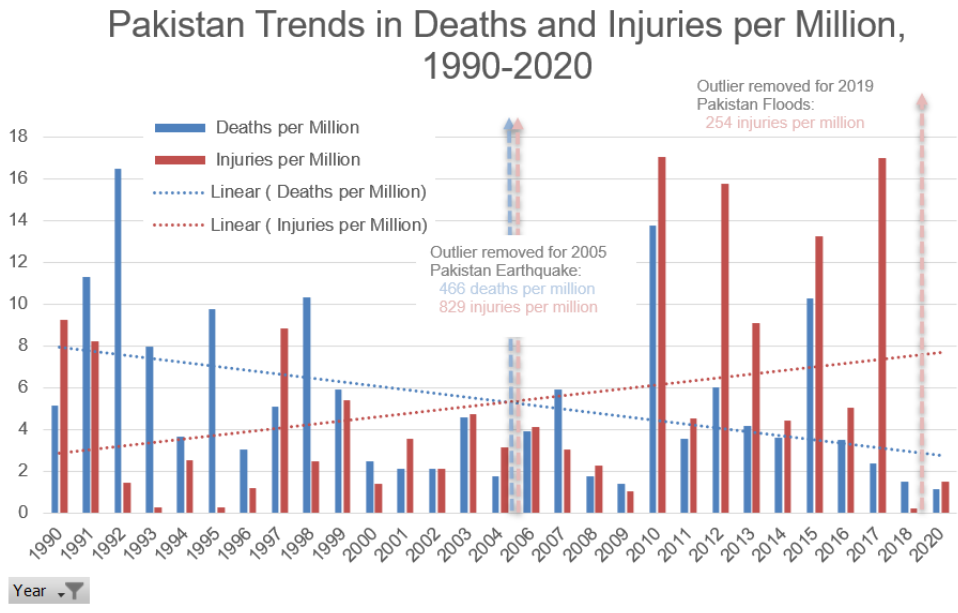




Figure 2. Trends in Deaths and Injuries per Million from 1990-2020 by country

## Importance of PEER training

The importance of PEER training was evaluated by asking Key Informants why training was important, how it had changed response, and what, if any, training of a similar nature was available prior to PEER courses.

## Availability of Training prior to PEER

Across all interviews and all countries, it was clear that PEER courses filled an important need. Similar courses were unavailable in South Asia prior to PEER. For example:

- **MFR & CSSR Courses:** Prior to PEER in **Nepal,** the Nepal Armed Police Force mandated road rescue training only. The Nepal Red Cross had standard first aid and life rescue training, though Key Informants noted the training was "more theoretical" and lacking in practical skills. Likewise, the Nepal Police Force had a "theoretical course on disaster management," but that to did not emphasize disaster response. In **Bangladesh**, the Fire Service and Civil Defense provided basic training for fire officers, including some simple rescue techniques, but "there was no standard, no curriculum, no modules, [and] no books." In **Pakistan**, the Rescue 1122 began offering training for paramedics and emergency medical technicians, but like in Bangladesh, the trainings had "no international guidelines… they were lacking in training standards." In India, the National Disaster Response Force did not exist prior to PEER, but Key Informants noted that prior to PEER, the paramilitary forces "were not trained in those activities [inside or] outside the country in any way." A few people got training in advanced search and rescue in the US, but apart from that, "there was not institutionalized training undertaken by the forces."
- **HOPE Course:** No country had training like HOPE prior to PEER. In **Nepal**, some people had gone for training in Israel; locally, some first aid and trauma training were available. However, only a single hospital had a training in disaster planning and had conducted a disaster drill, with British funding. In **Pakistan**, HOPE was "a brand-new approach." In **India**, the Indian Medical Association had established the concept of a 3-tiered training plan for members, starting with a short awareness program, then a 1-day training in disaster management, and finishing with a 3-day, in-depth training. Prior to HOPE, 1,000 doctors had participated in the short awareness program, but had not treated it with "much seriousness." In **Pakistan**, NIPSOM noted that they had no similar training prior to PEER.

- **CADRE Course**: Red Cross and Crescent Societies in Bangladesh, Nepal, and Pakistan did have trainings in disaster response prior to the introduction of the CADRE course. However, the focus was often on the federation's mission, values, and specific processes. In **Bangladesh**, the Red Crescent Society conducted training for staff, volunteers and other NGOs on first aid, emergency response, disaster risk reduction, disaster management and fire safety. In **Pakistan**, trainings included basic principles of the movement and how to carry out needs assessments and provide relief. In **Nepal**, it was on first aid and life rescue. However, all Key Informants noted that these courses were not as in-depth, skills-based, or effective as the CADRE courses. For government security forces in all countries, little to no community-based disaster response training or outreach existed.
- **SWR Course**: Respondents noted that a few individuals in **Bangladesh** and **Nepal** had taken swift water rescue training in the United Kingdom, but that no South Asian training was available. **Indian** respondents also stated that the country had no training like SWR.

## Importance of PEER trainings

With the introduction of PEER courses in South Asia, Key Informants were quick to note the value the training. PEER courses were notably different in quality, content, and approach. As the National Disaster Risk Reduction Management Authority of Nepal noted, these trainings have "enhanced capacity for better response." This came not only from the training itself, but from the response equipment provided through the PEER program. A further benefit came from better coordination. Specifically:

- **MFR & CSSR Courses:** In **Bangladesh**, Key Informants in the Fire Service and Civil Defense said, "our eyes are open after PEER program . . . [it] gives way to development." In **Nepal,** PEER training played a "vital role in providing knowledge to [Nepal Army] soldiers about life saving during a disaster." It helped them "respond promptly" and "sharpened and enhanced preparedness of the army." Furthermore, for the Nepal Police, these trainings instilled situational awareness in their trainees – it taught the concept of "safety first and be safe yourself so you can save others."
- **HOPE Course:** In **Bangladesh,** Key Informants noted that HOPE was "required" because the country was highly vulnerable to climate change, natural hazards, and urban technological accidents. The health sector had "long been neglecting the management of mass causality" and that typical management structures were not designed to effectively respond to these

events. A Key Informant in **Nepal** noted that HOPE introduced the basic concept of Incident Command System (ICS) coordination. In **Pakistan**, HOPE training taught hospitals how to employ surge capacity, how to deploy outside teams, how to triage and prioritize patients. Multiple Key Informants across the region noted that the training also standardized language of all stakeholders working in disaster response.

- **CADRE Course**: In **Bangladesh**, Red Crescent Society found the search and rescue components of CADRE especially valuable for supplementing their existing training. In **India**, it was clear that CADRE helped train communities as first responders. A representative of the National Disaster Response Force stated, "at least they will be there to help in first aid, evacuation, and taking quick mitigatory measures" before dedicated response teams arrive. When comparing CADRE to their prior trainings, a Key Informant in **Nepal** noted, "We realized that skills are more powerful than theoretical knowledge." With skills, the trained community was "more proactive during disasters." In **Pakistan**, CADRE training was important because "there are uniform standards." Trained community volunteers learned to apply CPR even accurately and effectively before Rescue 1122 arrived. For Red Crescent Society in Pakistan, CADRE training "built up local government and community capacity and enhanced "people's resilience" by helping make disaster response a "joint effort."
- **SWR Course**: While SWR was a pilot course in PEER 4 and unable to be further disseminated due to the COVID-19 pandemic, a key informant of Initiative Outdoor noted that without training, river guides were at risk; they attempted rescue without training and endangered themselves.

## PEER-induced Improvements in Disaster Response

Key informants were asked whether disaster response in their country had improved because of PEER courses. In many cases, they have specific examples of how the PEER courses changed response effectiveness, reducing disaster mortality.

In **Bangladesh**, the Fire Service and Civil Defense (FSCD) fully attributed a profound change in public perception to PEER training. Prior to PEER training, when the FSCD responded to fire incidents, locals would destroy their vehicles out of anger. The locals "always claimed that fire service was too slow" and did not consider the response time needed for the service to reach a location. After PEER training, the FSCD was able to develop trained, local volunteers that could help initiate fire response while waiting for service vehicles. These volunteers have also increased local fire awareness and risk reduction. Incidents of locals destroying fire service

vehicles "is going down." The In-Country Consultant further noted that in 2005, CSSR-trained personnel responded to a building collapse and implemented their training well. The operation lifted the image of response and relief operations in the country.

In the 2013 Rana Plaza building collapse, CSSR and MFR training directly supported reduced disaster mortality. Through training, the FSCD was able to rescue over expertly and swiftly 60 people in 2 days. Equally important, current PEER-based disaster management training for garment managers has reduced the incident of industrial fire in the country.

PEER training has also vastly improved coordination between the Bangladesh Red Crescent Society (BDRCS) and FSCD. Because of PEER training, "it has been easy to communicate and our relations with other organizations has improved a lot. When there is a casualty, there's a wonderful understanding between BDRCS and Fire Service. We work hand in hand." CADRE helped professionalize BDRCS response and build trust with other organizations. A commander in the Armed Force Division was reported to have said that if BDRCS, Fire Service and the Armed Forces are deployed together, "everything will be efficient." Volunteers from BDRCS have also developed a stronger sense of efficacy; they can "do something, [and] don't need to wait for Fire Service; we can respond first."

In **India,** PEER training has also improved disaster response coordination. In regional, multi-national disaster management exercises, PEER-trained National Disaster Response Forces (NDRF) has been able to effectively coordinate with colleagues from other countries. They have, according to the National Disaster Management Authority (NDMA), their forces have performed "at par, if not better" and in actual field response, "performed exceedingly well." This ability is attributed, in large part, to the PEER training programs. Furthermore, HOPE training efforts have led to the establishment of disaster management cells in 13 state chapters and 45 local city chapters of the Indian Medical Association.

One sign of the increased disaster response capacity in India is that PEER training has facilitated South Asian and international disaster response coordination. PEER-trained NDRF teams performed disaster rescue for several weeks in Nepal following the 2015 Gorkha earthquake. They also sent people to Japan for another disaster response. They are "more confident now to assisting other countries during disaster rescue."

In **Nepal**, the 2015 Gorkha earthquake put disaster response capacity to the test. For the Nepal Army, training in collapsed structures meant that their soldiers knew how to rescue survivors efficiently and safely. It ensured that soldiers would

"respond responsibly" and not become victims themselves. Training in medical first aid meant that soldiers could respond to many types of immediate medical emergencies in remote areas where medical teams would not quickly arrive. Prior to PEER, the Nepal Police noted that they "faced problems" and were "unskilled" when responding to incidents alongside Red Cross and NGOs/INGOs. The training improved coordination. PEER training ensured that they knew how to rescue survivors. According to the respondent, "everyone was [praising] us because we were able to rescue them. Behind that [ability] was the support of NSET 's [PEER training]." According to the National Disaster Risk Reduction Management Authority (NDRRMA), trained institutions "knew what to do" in comparison to the untrained organizations and local community. "They made a case and point on how such trainings make a difference in saving lives."

HOPE training was particularly valuable in the health sector. About 80% of hospitals in Nepal (100% in Kathmandu Valley) have disaster management plans, most prompted by HOPE training. Hospital staff worked efficiently, effectively implemented the referral and contact systems, and followed HOPE standards. Furthermore, hospital staff and security organizations were able to better communicate. Engagement between army and hospital staff during these courses helped form the informal relationships needed for trust and quick decision-making in disasters. As one person said, "everyone [in the Army, Police and Hospitals] knew each other through HOPE and CSSR trainings." Furthermore, health sector staff found HOPE content on amputation, learned from the Haiti 2010 earthquake, useful in the Gorkha earthquake response.

The effectiveness of HOPE had ripple effects that directly impacted response. After HOPE training, graduates of HOPE had given medical students a two-hour training on triage and the ICS system, based upon HOPE content. When the earthquake occurred on a Saturday afternoon, the HOPE-trained medical students at the teaching hospital immediately began using what they had been taught. They had segregated survivors arriving at the hospital into yellow and red groups, based upon the severity of their injuries. When professional staff arrived, they could immediately begin treating the triaged survivors.

In more routine disasters, PEER training had also improved response in Nepal. The Armed Police Force noted that they regularly used search and rescue equipment provided through PEER. The Nepal Red Cross Society noted that CADRE volunteers had mobilized during flood and earthquake events and were able to support and coordinated with the advanced rescue teams (whether Nepal security forces or international teams); they "knew their responsibilities and limitations" in supporting rescue.

In **Pakistan**, CADRE training among youth has become a platform for discussing safety issues and saving lives. Trained youth are carrying out campaigns in their community about not only the content in CADRE courses, but new issues, such as waterborne diseases and strategies for water filtration. They are bringing waste management and health to the forefront of community conversation. Meanwhile, in the major hospitals, HOPE trained staff are supporting hospitals in using color-coded triage systems and the use of proper personal protective equipment. Even the volunteer-based Red Crescent Society noted that CADRE training of their volunteers has led to joint simulation exercises that include Rescue 1122, local governments, and local Red Crescent chapters. These joint exercises build experience, trust, and the professional relationships important to effective response.

An important example of the direct benefit of PEER training in reducing disaster mortality came when Pakistan's PEER-trained teams were internationally recognized. In 2019, the United Nation's International Search and Rescue Advisory Group (INSARAG) recognized Pakistan's PES team as Medium Urban Search and Rescue team, the first in South Asian. The Pakistan team is now able to be globally deployed to support search and rescue operations in international disasters.

## Assessment of Partner Organizations

In **Bangladesh**, the In-Country Consultant clearly identified the FSCD as the most active and successful partner organization. The FSCD has been excited to engage with PEER and taken responsibility for institutionalizing PEER training in their organization. A strict selection process and clear high standards for certification has increased program prestige.

Implementation of HOPE has been more challenging in Bangladesh. On the one hand, doctors are very busy with private practices and had little interest or time for PEER training. On the other hand, the HOPE training has shifted from NSET to ADPC and back to NSET in different stages of PEER. This change of responsible program agency has "created confusion," something also echoed by Indian Key Respondents. In Bangladesh, funding for HOPE training has come through the PEER program, but also through the local USAID office.

A complex and competing donor landscape also appears to undermine PEER partner organizations in Bangladesh. Multiple donors appear to support PEER courses, but with little coordination. Partner organizations may avoid directly institutionalizing PEER courses because they can shop for donor support among the uncoordinated donor landscape. Furthermore, PEER seems to be unconnected with the country's Cyclone Preparedness Program under the Ministry of Disaster Management.

In **India,** The NDRF has taken strong leadership in institutionalizing CSSR and MFR, along with their instructor training courses. The Force was also beginning to initiate CADRE training. The Nodal Agency and In-Country Consultant both strongly believed the NDRF was benefiting from and institutionalizing PEER courses. Specifically, they noted that the NDRF had moved into a leadership position and now has a lot of "indigenous capability." Because of PEER training courses and the development of PEER instructors in the NDRF, expertise now lies with the NDRF, and they provide training to other paramilitary forces. According the NDMA, PEER has "added value … and has fine-tuned and added functionality to NDRF's methodologies."

The Indian NDMA also noted that the NDRF is carrying out disaster risk reduction and preparedness community awareness programs when they are not directly engaged in disaster response. They are able to tailor community training and awareness activities to the local community because NDRF forces are locally based.

The Nodal Agency and In-Country Consultant noted that the Indian Medical Association has struggled to carry out HOPE training and institutionalize it. One issue raised was the repeated change in leadership between ADPC and NSET, which has made it difficult to build and sustain relationships. Another is that doctors are less interested in taking a multi-day training, especially those in private practice who have no clear mandate for disaster response. This issue is reflected in other PEER countries as well. Key informants felt that hospital administrators needed more tailored and shorter training. Further, Key Informants in India noted that efforts to institutionalize HOPE training needed to happen through the ministry that controls policy and curriculum of medical sector training. As in Pakistan, HOPE advocates were struggling to convince those stakeholders to adopt HOPE in medical curriculum standards.

It is also notable that the Indian Red Cross Society is not engaged in PEER courses, like other federation partners in Pakistan, Nepal, and Bangladesh are. Similarly, the NDMA hosts a national flagship program called the National Cyclone Risk Mitigation project, and the *Afda Mitra* -Friends in Disaster program that recruits volunteers for disaster response. These programs and organizations engaged in community training related to disaster relief and response are disconnected from PEER CADRE training, potentially decreasing the effectiveness of response coordination.

In **Nepal**, NDRRMA found it difficult to assess which partner organizations had been most successful as a PEER partner organization. In the field, it was difficult for the NDRRMA to differentiate between security personnel who had, or had not, had PEER training. The Nodal Agency further wondered how PEER training was translating to real-world experience. The program lacked detailed and well-known

case studies of PEER impact. However, the PEER program was well known at the federal government level and that the security forces were coordinating and "working in tandem" well, a fact attributed to the standardized PEER trainings.

In observing disaster response, the NDRRMA Key Informant noted that local volunteers tended to make an immediate difference in response, given the remoteness of many communities and difficulty security forces had even reaching disaster sites. The Authority noted that future efforts would be to build local capacity to support the trained response specialists in the Nepal Army and Armed Police Force.

In **Pakistan,** the in-country consultant felt that all partner organizations were performing well in organizing, implementing, and applying PEER courses. CADRE, specifically, was seen as a training course that was well-adapted to the country's community-based approach to disaster management. As the NDMA key informant noted, MFR, CSSR, and CADRE have been most successfully implemented "because it is a local method and local communities are interested in having some sort of control over their own safety, their own capacity in their community." The MFR CSSR, and CADRE trainings can be "brought down to the community level," which helps explain their successful adaptation. As such, multiple partner organizations had integrated CADRE training into their activities.

In contrast, HOPE has been more difficult to adapt and integrate, partly due to a highly top-down bureaucratic structure established under British colonial rule that strictly controls university training and accreditation in the medical fields.

The Punjab Emergency Services (PES) was the strongest partner organization in fully institutionalizing PEER courses in their organization. In the last 10 years, the PES has been able to establish services in all 36 districts of the Punjab and about 120 subdistricts. In each, they have directly trained local volunteers using the CADRE training material, creating "strong penetration at the grassroots." The PES has established a database of local volunteers regularly engage with them for refresher courses and selection of trainers. The PES and their trained community volunteers have strong community acceptance, well beyond that of the national government's disaster response authority. The PES's success was attributed to being a newly formed organization lead by young, energetic staff eager to champion disaster response. Current efforts are aimed at expanding the Rescue 1122 service to other provinces.

The Pakistan Red Crescent Society has integrated CADRE training into their program for District Emergency Response teams and has a strong, grassroots network of volunteers for disaster response.

Despite these important successes, regional coverage is insufficient. Rescue 1122 is currently being established in other provinces, such as Singh and Baluchistan. The PEER Swift Water Rescue course is needed in northern mountainous regions. NHEPRN has, to date, focused HOPE training in urban centers, but is getting repeated requests from district health departments to organize trainings outside the main urban areas. Security concerns and the difficulty of getting trainers to remote areas has hampered training in some areas. Furthermore, it is increasingly clear that Pakistan's Civil Defense needs to be better integrated with PEER training. Current tensions over responsibility and authority between Civil Defense and Rescue 1122 need to be resolved. PEER training may be a way to revitalize and improve civil defense forces.

## Participants and Instructors

Each organization had their own method of selecting participants. Some organizations trained all members and others trained only a limited number. Partner organizations from the security forces tended to have systems for training a large portion, or even all, members; they added MFR and CSSR training content to their basic training sequence. CADRE partner organizations were more varied, with some achieving widespread community training and others just now integrating it into their practice. HOPE instruction tended to be the most limited, with partner organizations struggling to attract busy doctors to the intense training program. These organizations had yet to successfully integrate HOPE training into medical training curriculum, although that was a long-term goal in several countries and several organizations were in active discussions with education sector stakeholders at the time of the interview.

Many organizations struggled to retain senior instructors. The instructor training sequence was lengthy, and attrition was a constant issue. HOPE instructors would often move to new hospitals or private practice. CSSR and MFR instructors were often promoted, stationed in new locations, or retired. Some organizations were able to train fast enough to overcome this attrition rate; others were losing instructors and looked to PEER for instructor training support. One nodal agency representative even stated that PEER participant to instructor ratios were "too stringent and one of the roadblocks of implementation."

Key Informants offered in-depth comments on each organization's selection of participants and instructors. Further detail is found in Participant and instructor selection, by partner organization.

## Use of Periodic Assessment

When it came to periodic assessments of graduates after PEER course completion, standards varied and their seemed to be no systematic guidelines. In **India**, the NDRF organizes refresher courses for graduates of the MFR and CSSR courses and similar refresher courses for instructors. Graduates take the refresher course every 2-3 years. In **Nepal**, HOPE trainees do not have refresher courses or a limit to their certification. The Key Informant there noted that online virtual refresher courses would be more valuable than traditional face-to-face refreshers. Nepal Red Cross had internally developed a CADRE refresher course, in consultation with NSET. It was administered every two years. For the Nepal Army, refresher trainings, drills and simulations were regular. In **Pakistan**, PES/Rescue 1122 staff receive CADRE, MFR, and CSSR refresher courses every two years. The organization reports certification status by district each year. For the HOPE course graduates, NHEPRN organized five asynchronous online refresher courses for their graduates during the COVID pandemic. They had "overwhelming participation . . . and keen interest," even though the online refresher only reviewed theoretical knowledge.

## Networking

From interviews, it appears that little formal PEER networking has occurred. However, informal networking driven by graduates and instructors does exist. Instructors and participants use WhatsApp, Facebook, phone lists, and other social media tools to communicate. They use these informal networks to coordinate with NSET's PEER staff and each other to "coordinate tactics to try to get future courses planned out and to push the administration to do this more effectively." In **India**, HOPE graduates have organized via WhatsApp to create a formal body to advocate for HOPE instruction and integration.

## Adaptation and Institutionalization of PEER courses

Beyond participating in PEER courses as trainees and instructors, partner organizations had engaged in significant institutionalization and adaptation of PEER courses. Details about this adaptation and institutionalization by partner organization is cataloged in Partner Organizations Institutionalization and Adaptation. Overall, institutionalization efforts included the following:

- MFR and CSSR Institutionalization. Most MFR and CSSR partner organizations have institutionalized training to the point where it is fully integrated into basic training for their members. For example, these courses are part of the Nepal Armed Police basic training and part of the Nepal Army's Disaster Management course, taught to about 15% of the force. It is

part of the Fire Service and Civil Defense basic training in Bangladesh. It is part of Rescue 1122 staff training in Pakistan's Punjab and an expanding number of other provinces. In India, it is fully integrated into training for National Disaster Response Force members.

- HOPE Institutionalization. While some HOPE partner organizations struggle to attract participants in the public and private sector, each is beginning negotiations with key stakeholders that will integrate HOPE training into national health-sector education standards. HOPE training is institutionalized into education standards at Tribhuvan University Teaching Hospital in Nepal. Nurses receiving a MBBS (Bachelor of Medicine and Bachelor of Surgery) take a course in HOPE vs Disaster course, based upon HOPE content.
- CADRE Institutionalization. CADRE is fully institutionalized in Pakistan and is moving in that direction in India. Nepal and Bangladesh National Red Cross/Red Crescent Societies find the training valuable and are considering how to integrate CADRE into their existing disaster management courses.
- SWR Institutionalization. Roll out of SWR training was stymied by the COVID pandemic. However, the Indian NDRF noted that already they had incorporated PEER SWR training content into their training courses.

Beyond institutionalization, PEER graduates are adapting PEER training for community outreach, capacity building, and whole community response readiness. In Bangladesh, FSCD responders who have taken PEER-based trainings are, themselves, conducting trainings all over the country, especially for companies in the garment sector. PES/Rescue 1122 has expanded CADRE training to over 50,000 volunteers; those volunteers are starting risk awareness and reduction campaigns in local villages. Similarly in India, NDRF members are conducting 15-day community training programs based upon CADRE. The Armed Police Force and Police Force in Nepal have started risk awareness campaigns and are working with local schools. The Fire Service and Civil Defense of Bangladesh too is working in grade schools around fire awareness. NIPSOM in Bangladesh has developed and carried out Emergency Preparedness and response training in community health clinics. Meanwhile, the FSCD has used PEER content to develop a 3-day urban disaster management program, to date training 47,000 volunteers, in three mega-cities.

A more detailed breakdown of how Partner Organizations are using PEER content for institutionalization and/or adaptation and dissemination in other formats can be found in Partner Organizations Institutionalization and Adaptation.

## Key Informant Assessments of PEER 4 Objectives

At the conclusion of each interview, Key Informants were asked to assess each of the three PEER 4 program internal indicators on a scale of 0 to 10, with 0 meaning poor and 10 meaning excellent. The minimum, maximum, and median score are shown in Figure 3.

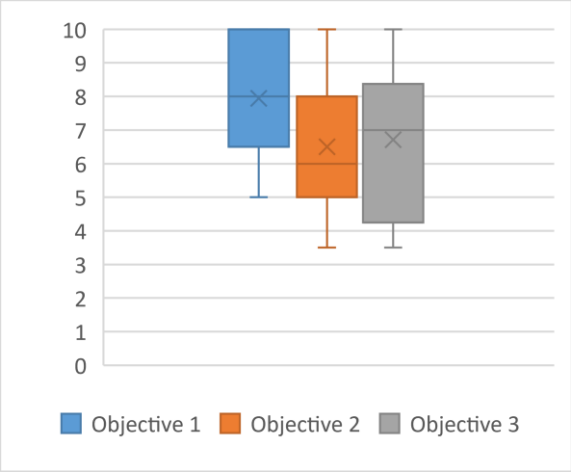



Figure 3. Key Informant assessment of how well PEER Stage 4 met program objectives

Overall, Key Informants were overwhelmingly positive about PEER 4's ability to meet its objectives. Each is discussed below:

**IR1–Enhancing partner institution capacity through standardized trainings/courses.** Key Informant were most positive about PEER 4 meeting the first objective of enhancing their organization's capacity through PEER trainings. Everyone was in agreement about the quality of PEER courses and how their organization's ability to respond in a coordinated and efficient way had increase with PEER. Informants, on average, gave the first objective a score of 7.95 across 19 interviews. (In three cases, the interview concluded without asking this question.) Scores ranged from 5 to 10, with over half being 8 or higher. Key informants explained their assessment and score, saying:

- "I've completed 24 trainings in different institutions, but never experienced training like the one in PEER." -Nepal
- "They are mainly focusing on capacity building, not only implementation." -Nepal
- "With PEER, it is possible to respond as a coordinated whole." -Nepal
- "It couldn't have been better. If tomorrow there was no PEER, [partner organization] has the capacity to continue training." -Bangladesh
- "The number of trainings is not good enough." - Bangladesh
- "PEER should be [working] with national institutions to find [gap areas]." -Bangladesh

- PEER has "developed a framework for how to develop high quality training standards." -Pakistan
- "All the courses have a very positive impact on disaster response."-Pakistan
- "Each country has its own constrains, style of functioning. Therefore, a low score cannot be fully on the implementing partner."-India
- "Our capacity, whatever it is today, was initiated by PEER." -India

**IR 2–Supporting institutionalization of PEER courses in partner institutions.** They were slightly less positive about meeting the second objective of PEER course institutionalization, but still ranked this objective high.

Key Informants, on average, gave the second objective a score of 6.5 across 17 interviews. Several interviews did not answer this question, or when asked, could not give a single numeric value. Scores ranged from 3.5 to 10, with most responses clustered between 5 and 8. Much of the conversation focused on how internal and external constraints kept them from fully achieving institutionalization. HOPE course partners struggled in most countries, often because institutionalization required Ministerial approval of university curriculum, a laborious process. Red Cross and Red Crescent Societies also were less able to institutionalize CADRE because of the similarities with other training programs, although some countries found ways to incorporate PEER training into their standard programs. Key informants explained their assessment and score, saying:

- "It is not possible to incorporate PEER program into the whole of our [organization] with only one [instructor training] a year." – Nepal
- "For institutionalization, there's a lot of stakeholders and PEER needs to coordinate them better."- Nepal
- "We may have incorporated PEER into our training, we may have benefited. But institutionalization is a long way to go." – Bangladesh
- "It is an important objective, but [we] weren't able to achieve it. . . there are many other factors like policy makers, ministries, hospital administration." – Pakistan
- "We have had a huge success with MFR, CSSR, and CADRE." – Pakistan
- Especially with the experience we gained in PEER 3 and 4, we will be taking PEER 5 to another level. . . institutionalization." -India
- "No doubt the PEER courses and content has really helped . . . but it would be better if our training institutes were accredited for [giving] trainings."- India

**IR 3–Strengthen South Asian regional coordination among emergency response organizations.** The last objective was also graded positively. Many Key Informants saw that their ability to coordinate with other responders in their country had increased with PEER. They also noted that they had successfully achieved regional coordination in response to the 2015 Gorkha Earthquake in Nepal. Yet, many Key Informants yearned for more regional coordination in the form of ongoing engagement with each other.

Key Informants, on average, gave the third objective a score of 6.7. Only 12 interviewees provided a numeric response to this question, with nearly half saying they could not give a numeric answer. Scores ranged from 3.5 to 10, with most answers clustered between 4 and 8. Here, Key Informants noted:

- "Some permanent umbrella agency is required." -Nepal
- "We do not have that environment to share our knowledge with other countries and vice versa." – Nepal
- "When India came to support us [during the earthquake], they were our [peers]." -Nepal
- "Through regional planning meetings, there are opportunities to share ideas and [build] personal relationships." -Bangladesh
- "Initially we had trainers from other countries; now we send trainers and teams of rescuers."-Bangladesh
- "Institution response coordination within the region is not up to the mark and can be expanded."-Bangladesh
- "PEER should give trainings, but PEER should [also] arrange simulations. [We] will all have the same language to any type of disaster operation."-Pakistan
- "Our master trainer and training coordinator are working in other countries, and that's leading to more coordination."-Pakistan
- We "have good coordination with NSET, but not with other countries." -Pakistan
- "Definitely could be improved, especially with the heavy emphasis on online work post-COVID."-Pakistan
- South Asia has "a lot of regional coordination [like] IORA. . .BRIM . . . SAARC . . . BIMSTEC. . .I wouldn't know where PEER would have fit in that. . .PEER is one of the factors that such an arrangement exists in the region."-India

- "This is the realm of the External Affairs Ministry and policy makers. . . [but as for] standardization of trainings, response procedures, technologies, and methodologies, PEER goes a great way." – India

## Key Informants' View of Important Successes and Areas of Need

Key Informants across all four countries indicated what they saw as PEER 4's largest contributions.

PEER universally increased trained rescuers, build instructor capacity, and brought equipment to partner organizations. With that has come direct improvements in disaster response and decreased disaster mortality, as seen in the effective urban rescue in Bangladesh's 2013 Rana Plaza collapse, effective survivor triage in Nepal's hospitals during the Gorkha Earthquake of 2015, and the coordinated, regional rescue support India provided to Nepal, and now the emergence of INSARAG certification of Pakistan's urban rescue team.

Beyond these obvious changes, PEER 4 continued to build a common standard for rescue across the region, most recently with the introduction of standards for Swift Water Rescue. Such standards, Key Informants explained, have provided a framework for national and organizational response guidelines and standards. Several noted that it was after PEER, and through NSET support, that high-level, multi-stakeholder conversations could address coordination across agencies. It also supported development of training and education standards.

Changes in the region went even further beyond the immediate PEER training impacts. As with earlier PEER stages, PEER 4 continued to bring disaster awareness to the region. During prior stages, this awareness occurred within partner organizations and nodal agencies, then to PEER trainees. In PEER 4, disaster awareness is expanding further and bringing direct awareness to communities, such as CADRE youth volunteers in Bangladesh and Pakistan and NDRF forces in India leading community awareness programs that draw basic concepts from PEER courses. Some Key Informants noted that PEER 4 helped the country better understand and support the concept of communities as first responders.

Key Informants were also asked what the largest areas of continued need. Responses varied and were often particular to a specific country and organization. However, several larger themes emerged.

While requests for more training is a continuous need, multiple Key Informants noted that they needed more training for master trainers to help retain the high quality of master trainers. Even organizations that had fully institutionalized PEER basic and instructor training internally, they valued PEER training that supported the

development of their master trainers. PEER's advanced instructor training brought new research, experience from outside the country, and supported the development of a regional understanding of best practice in rescue and response. It enhanced even institutionalized PEER training programs. Key Informants also believed that increasing online refresher courses is important, especially given the severe restrictions on in-person training PEER 4 experienced during the COVID-19 pandemic. Related to the pandemic, some Key Informants felt that PEER 4 missed an opportunity in providing clear guidance and protocols for pandemic training adaptations, including online training and virtual monitoring.

Key Informants also identified potential new courses they wanted. These include mountain rescue, school-based emergency response, CBRN (chemical, biological, radiological and nuclear) response, forest fire management, and advanced search and rescue. Forest fire management and advanced search and rescue were identified by Key Informants in several countries. While CBRN was identified by Key Informants in only one country, a similar idea of industrial accident response was proposed elsewhere.

Key Informants in several countries believed PEER efforts needed to better extend response capacity building to the subnational level, especially in federalized countries and those with highly geographic diversity. Some noted that training like SWR was critically important, but only to some regions of their country. They believed that direct training and capacity building at the sub-national levels would be more effective and efficient. In federalized countries, Key Informants also wanted PEER to be supporting sub-national, and even district-level, disaster response capacity building directly, rather than having that support come from their own national-level organizations with PEER training. Such an endeavor would vastly exceed PEER's capacity and mandate at present.

Better communication and support with in-country coordination was also seen as an area for further improvement. Some organizations noted that communication with PEER was infrequent and mostly limited to training logistics. They wanted more frequent and consistent communication with PEER. In Bangladesh, others noted PEER could support coordination among the numerous external donors that funded disaster awareness, response, and capacity building programs – often in an uncoordinated patchwork.

More flexibility and a gradation of course intensities were also recurring themes. Some partner organizations struggled with elements of PEER's training guidelines, most often related to instructor ratios, course length, and course depth. All agreed the PEER courses were a gold standard, but many also found that course protocols could also become barriers for gaining interest or infusing content into existing

programs. Partner organizations there wondered how much and what types of adaptations could reasonably be called "PEER courses" and wondered whether adaptations –such as a one-day disaster response course for doctors -- should relate to PEER, and if so, how. This was most notable around HOPE and CADRE courses, though many partner organizations had also taken elements of MFR and CSSR to support also basic training or community outreach.

The last theme centered around the need for enhanced regional coordination and collaboration. As one Key Informant noted, being part of PEER was akin to a bi-lateral relationship. Engagement with NSET was good, but direct engagement with other partner organizations was infrequent and limited to occasional regional meeting or personnel from different countries participating in training courses. Some organizations believed that more regional engagement and collaboration would strengthen skills through knowledge sharing and enhance response by building trust and relationships ahead of coordinated disaster response.

## Recommendations

Based upon the document review, databased assessment, and Key Informant interviews with nodal agencies, in-country consultants, and partner agencies, the following recommendations may be useful for future capacity building for disaster response readiness in South Asia:

Consider a modularized approach to response training courses. PEER basic training courses are from 4-13 days. This length of time was seen as appropriate for the course content. In many contexts, the current approach of training in a single, intensive session was ideal. Doing the training in a single session ensured that participants completed the course. When courses had been split into multiple training periods, some partner organizations noted that the participant list would change.

However, some partner organizations struggled to attract participants because of the length of the training. This issue was most acute for HOPE training but may also be an issue for CADRE. Trainees may be unable or unwilling to set aside professional commitments for that length of time. Trainees in response organizations may need to respond to emergencies. Where prospective trainees are volunteers, such as with CADRE and HOPE, some may not be fully convinced of the value of the training before starting.

Given these struggles, some courses may be appropriately broken into smaller modules. These smaller modules could be taken sequentially, but not necessarily all at once. For example, a course could be divided into several 1–3-day modules. In

some contexts, it may be best to have trainees take all modules together, much like PEER courses are taught now. In other contexts, it may be more appealing for trainees to take modules further apart, such as taking an initial module one week and another module a month later.

Certainly, partner organizations are already breaking up PEER courses into smaller segments, and/or combining modules from multiple courses in their institutionalization process. This institutionalization should continue.

Formal modularization directed by PEER would enhance flexibility for partner organizations. It would also help maintain a regional standard and reduce the burden on partner organizations who are currently trying to modularize the PEER courses independently. Such a modularized option for PEER courses could be appealing for a) new partner organizations, b) engaging new participants (e.g., new hospitals reluctant to devote four days to HOPE training), and c) enhancing community outreach based upon PEER courses.

## Instruction Modalities

### Face-to-Face Instruction

Traditional mode where instructor and participants are in the same location together.

### Virtual, Synchronous Instruction

Instructor and participants engage with each other in real time, through Zoom or other video conferencing

### Virtual, Asynchronous Instruction

Participants watch pre-recorded "lectures", complete and submit online assignments and/or exams, and may engage with instructor or other participants through online discussions.

### Hybrid Instruction

Instructor and participants engage in a mix of face-to-face, virtual synchronous and asynchronous modes. Modes are chosen based upon the content and learning objectives of each segment of the course

Importantly, where participant continuity could be ensured, modularization and spreading out learning over a longer period increases long-term memory retention of both knowledge and skills, especially when review and repetition is incorporated into the learning.

**Recommendation:** PEER courses should be formally reviewed, and recommendations developed for how to break PEER courses into discrete and independent modules be made. Additional review, knowledge and skills checks

should be added when courses are broken into multiple sessions to reinforce learning.

**Consider diversifying instruction modalities.** The COVID-19 pandemic caused massive worldwide disruption, including the temporary halting of PEER training organized and conducted by NSET. This disruption mirrored pandemic challenges to the education sector more broadly.

The constraints of the pandemic also resulted in a flourishing of new educational innovation in the education sector. New approaches to learning were explored, adapted, and combined to create learning even when physical proximity was not possible.

PEER has relied almost exclusively on the Face-to-Face instruction modality (See Instruction Modalities sidebar). The pandemic showed that reliance on a single modality can result in severe disruption during a pandemic; the same may occur under a regional disaster, political, or economic crisis. Diversifying instructional modalities could create future flexibility and resilience.

Yet, care must be taken to maintain PEER's high standard of instruction and the dual emphasis on knowledge and skills acquisition.

An irreplaceable element of PEER training in the hands-on, skills acquisition. Such skills acquisition is best achieved through face-to-face synchronous learning.

However, in some limited circumstances, virtual, synchronous instruction may also work well for skills acquisition training. For example, remote master instructors may be able to video monitor skill acquisition activities while a local instructor is on site with course participants. Local instructors may also be able to video record skills acquisition exercises, sending them to remote instructors for review and approval. Even under normal conditions, the option of virtual synchronous instruction or course monitoring may reduce travel logistics, costs, and personal impact for regional instructors.

A more promising situation arises when considering PEER's focus on knowledge acquisition and retention. Virtual and hybrid instruction modalities could enhance the reach of PEER courses and allow for more frequent refreshing of knowledge.

Some options for virtual and hybrid knowledge acquisition may include:

- **Recorded knowledge acquisition modules in basic training courses and refresher courses.** Learning and knowledge retention can increase when participants have access to high-quality recordings of the best instructors from across the region. Many Key Informants noted that having instructors

from other countries increased interest and learning. However, having instructors from multiple countries was not always possible, especially when PEER courses became institutionalized in an organization. PEER-created, recorded modules and refresher courses can capitalize on the value of international sharing and extend that benefit to more participants. Such recordings be broken into short segments; between each segment, participants should answer questions to ensure knowledge acquisition. Those who fail the questions, should be sent back to review the recorded segment again.

- **Discussion platforms for questions and answers.** Regardless of modality, participants and even graduates should have a way to engage with instructors and each other asynchronously. Digital discussion platforms are excellent places for a) participants to pose questions to instructors, b) for instructors to pose fictious scenarios and have participants apply a concept, and c) have participants explain how they applied a concept in a real-world situation months after training. Digital discussion platforms are excellent for sharing insights or troubleshooting issues, even learning the perspectives of someone from another organization or region. Digital discussion platforms would enhance training, graduate engagement, and regional best-practice sharing in all contexts, but would be especially valuable for virtual, asynchronous learning.
- **Use remote video monitoring.** Digital exam proctoring, where applicable, can be used for monitoring trainees taking written tests or demonstrating skills.
- **Use digital learning platforms to expand test question options.** Current PEER review questions on the PEER website are limited to multiple choice questions. New teaching and learning platforms, many of which were enhanced during the pandemic, allow for a wider range of question types. On e-learning platforms, instructors can now assess knowledge using a range of question types: multiple choice, select all, matching, short answer, drawing on a photo or map, questions with a visual in the description, and questions that require the participant to upload an image or video they make. Such e-learning platforms could enhance PEER review quizzes, refresher courses, and virtual learning modules. Canvas, Blackboard Classroom, GoReact, Lumio, and live remote polling tools such as Socrative, should be explored as options for delivering virtual courses or course segments.

### Recommendation:

PEER should identify best practices from virtual and hybrid learning by engaging the expertise of education technology specialist. PEER should then infuse these best practices into PEER training by providing a suite of options for each PEER course.

**New forms of regional collaboration.** Many Key Informants were clear that they wanted more regional collaboration. While regional meetings and workshops have been held, these have centered around PEER course development and implementation. Regional collaboration could take new forms, such as:

- **Joint tabletop exercises.** Regional tabletop exercises on existing and emerging disaster threats could be organized. Tabletop exercises help participants practice Incident Command coordination across multiple organizations, or even countries. The exercises also help participants build the trust and relationships that enhance response in real events. Such tabletop exercises could occur at a physical location or via virtual platforms, such as MS Teams or Zoom Breakout Rooms.
- **Joint simulation exercises and/or competitions.** Simulation exercises designed to refresh and practice response in a multi-national, coordinated way would also be beneficial. PES/Rescue 1122 already holds competitions for CADRE volunteers in the Punjab. In India, the NDRF already has a disaster simulation site at the Ghaziabad unit where they conduct simulation exercise. Such regional exercises or community competitions, while hosted in a particular country, need international coordination that is beyond the mandate of partner organizations.
- **Post-disaster lessons learned workshops.** Regional conferences and panel discussions on lessons learned from response to disasters in SAARC countries, as well as disasters in other regions, could be helpful. Such events, even if short or virtual, help build and maintain professional identity. They also can spark important conversations and improve organization protocol.

As one Key Informant noted, "With PEER, it has been possible to replicate the knowledge outside [our country]." Such sharing across South Asia and globally is one of the most valuable benefits of PEER 4 and future PEER endeavors.

### Recommendation:

PEER countries should begin to develop and lead regional disaster response readiness activities that encourage regional collaboration, review skills, and maintain professional networks.

**Consider shifting towards accreditation.** As PEER partner organization further institutionalize existing PEER courses, PEER may need to provide more of an accreditation role than a course delivery role. In interviews, Key Informants from multiple organizations and countries were unclear about whether their adaptions could be considered PEER courses. Phrases such as "not exactly PEER" and "based upon PEER" were frequent. Partner organization adaptation to date is highly laudable. Yet, adaptation may, at times, also dilute course rigor or reduce student learning outcomes.

The region would benefit from a more robust, consistent approach to verifying the rigor and effectiveness of response training t. Where desired, PEER could perform the evaluation and accreditation as an external body and pass their recommendations to appropriate national ministries. Where existing international response accreditation already exists, such as the United Nation's INSARAG accreditation, PEER could support partner organizations in applying for and receiving this external accreditation.

### Recommendation:

USAID or other donors should consider funding for developing and launching a regional disaster and emergency response training accreditation program. Such program should ensure consistently high learning outcomes and a common terminology and approach. Once established, such a regional accreditation program should be funded by national governments and staffed by country representatives and topical experts.

**New course development through support of partner organizations.** Disaster risk continues to evolve in South Asia. Climate change, population growth, urbanization, and globalization will continue to shape disaster response needs. To continue reducing disaster mortality, PEER partner organizations and nodal agencies will need to enhance their skills in new areas. Some of the most prominent include:

- **Advanced forest fire response.** Countries in South Asia appear to have strong and growing capacity in urban fire response and small wildfire management. Climate change is increasing the intensity and duration of wildfires. South Asia would benefit from training in large-scale wildfire management and mitigation, including research on effective fire risk metrics and monitoring tools.
- **CBRN response.** Continued urbanization and industrialization in South Asia is increasing the need for response to industrial accidents. Training in

chemical, biological, radiological, and nuclear response may be especially important for urban areas.

- **Advanced remote response.** Several sub-national regions in South Asia are remote and mountainous. Risks there include GLOF, landslide, and avalanche, often in extreme weather conditions. An advanced mountain rescue training was seen as important for several countries.

### Recommendation:

Partner organizations with emerging expertise in new response topics should collaborate with PEER or a future regional disaster readiness platform to develop new PEER-affiliated training programs. PEER should serve to connect regional expertise with global best practice and advanced training programs. External funding should partially support course development and the initial training of instructors. However, Nodal Agencies should swiftly support institutionalization of these new courses in existing and new partner organizations through mandates and funding.

**Hospital readiness recognition.** Partner organizations offering HOPE courses often struggled to attract private sector health workers. These organizations were finding new avenues for institutionalizing HOPE – working with Education Ministries and university curricular bodies, developing short awareness courses, and breaking courses into multiple sessions. However, attracting private sector interest will likely remain difficult.

### Recommendation:

HOPE partner organizations and nodal agencies should consider whether a system of acknowledging and rewarding hospitals for disaster response readiness would improve interest. Seals of approval, award ceremonies, public lists of hospital with certified response plans, and other mechanisms may be particularly appealing to private sector hospitals in competition for public recognition and patients.

**Regional Memoranda of Understandings for Mutual Aid.** Over the last 20 years, PEER has enhanced country level disaster response across the region. In the Gorkha Earthquake, regional response coordination helped save lives. Regional mutual aid during large-scale responses should be further formalized.

### Recommendation:

Nodal Agencies should begin formal discussions that can lead to bi-lateral memoranda of understandings (MOUs) regarding mutual aid during disaster response. PEER can support this process by facilitating conversations, developing a

list of considerations, sharing model MOUs and template language. Careful consideration should be given to request-for-aid protocols, roles and responsibilities, chain of command for responders working in a requesting country, cost reimbursements, standards of care, and liabilities.

**National investment in instructor training, research, and development.** The gains that PEER has made over the last two decades are easy to lose. It takes financial and human resource investments to maintain highly trained response personnel. Many PEER partner organizations struggle with loss of senior instructors due to retirement, reassignment, or leaving the organization for private sector positions. Furthermore, all trained personnel have natural knowledge and skills degradation.

### Recommendation:

Nodal Agencies and partner organizations must develop strategic, long-term plans for developing and retaining instructors and ensuring response readiness of training graduates. PEER performs an essential function in this task. PEER often serves as institutional memory that can help educate and guide new political leaders and partner organization administrators. These new leaders and administrators are often unaware of PEER's history, or the considerable investment made, and continued support needed to maintain their country's disaster response readiness. PEER can serve as an external, international orienting body to help Nodal Agencies and Partner Organizations develop and maintain the will for, and funding of, institutionalized PEER training. Especially important is helping these key decision makers see the value of investing in PEER instructor training.

Beyond continuing existing PEER training and its institutionalization, Nodal Agencies should further invest in research and development for disaster response readiness. Research is needed on how quickly knowledge and skills degrade among training graduates. Research is needed to develop the most optimal training protocols – for example, around course length, participant numbers, instruction modality. Optimal training protocols may vary by course type and by country and partner organization.

## Conclusions

This external evaluation of PEER Stage 4 finds that PEER has been an invaluable investment in disaster response readiness in South Asia. Over the last 20 years, PEER has been a strong and successful program that has developed high-quality trainings in disaster response. Overall, PEER training has resulted in 6,289 graduates of MFR, CSSR, HOPE, CADRE, and SWF basic and associated instructor training sequences. At the same time, PEER has donated important life-saving equipment to partner organizations. Specifically, PEER 4 has resulted in a new Swift Water Rescue course

and online refresher courses. However, these training statistics ***vastly underestimate*** PEER's influence in the region.

PEER Stage 4 focused on consolidation of prior PEER stages, and especially on the institutionalization of PEER courses within partner organizations. By this measure, PEER has made remarkable achievements that are not visible when simply counting PEER course graduates.

The external evaluation found that most MFR and CSSR partner organizations had integrated these PEER courses into their regular training program. This integration had occurred in all four countries. HOPE partner organizations were engaging with Ministries of Education and university leaders to integrate training into health worker curriculum; this integration had already taken place at Nepal's Tribhuvan University. Red Cross and Crescent Societies regularly taught or had integrated CADRE into their training programs.

Even beyond this substantial institutionalization, PEER course content and graduates are shaping disaster response and readiness in society. PEER graduates were training private industry, tens of thousands of community volunteers in Bangladesh and Pakistan, and engaging children and youths in disaster preparedness and response in primary and secondary schools. These tertiary impacts are significant and align with a whole community approach to disaster response.

PEER has also formed an important in-country and regional network of trained disaster response personnel. Those with direct or institutionalized PEER training have a common set of terminology and a common approach to managing decision-making during response. Moreover, regional trainings and sharing of regional instructors has built important professional relationships and a broader trust across organizations and countries. Those exposed to PEER training note that they are much better able to coordinate response as peers.

PEER impact is also notable in creating better disaster response and reducing disaster mortality in South Asia. CADRE trained community volunteers in multiple countries are now able to initiate response and coordinate directly with paramilitary and security forces when they arrive. MFR and CSSR trained responders have vastly increased their capacity to successfully extract and stabilize survivors of building collapse, flood, and earthquake events. Community trust in the Fire Service has increased substantially in Bangladesh due to FSCD's increased effectiveness in responding. The coordinated response to the Gorkha earthquake in 2015 showed how fundamental PEER has been in reducing disaster mortality thru better disaster response. Multiple organizations in Nepal and India noted that PEER training ensured smooth response coordination and resulted in a significant increase in lives saved.

Notwithstanding these notable successes, South Asian capacity in disaster response remains somewhat precarious. Some partner organizations still rely upon PEER instructor training and have not fully built capacity to maintain sufficient senior instructors. Turnover at the Nodal Agencies is also a challenge, with new decision makers needing to be educated on the importance of response readiness and the necessity of fully funding response training. PEER has functioned as institutional memory and advocate for national investment in disaster response readiness. That function is likely to still be needed for some time.

National and regional risks are also changing, and with it the need for new training. Climate change, urbanizations, and industrialization are raising exposure and vulnerability around wildfire and chemical, biological, radiological, and nuclear (CBRN) accidents. On a sub-national scale, flood rescue and advanced mountain rescue are also needed. Because of the high-quality response training the PEER has provided, partner organizations are increasingly aware of response capacities they do not yet have. Yet, an important tension exists between, disseminating existing PEER courses more broadly -- especially HOPE, CADRE and SWF – and developing new courses. New course development will need to avoid siphoning resources from existing PEER courses.

Within this context of widespread institutionalization, inconsistent national commitment, and changing risk, an important question emerges.

### Should PEER continue? Is it still needed?

This external evaluation finds that a regional disaster response readiness platform is needed in South Asia, whether it be an extension of PEER or something new. This response readiness platform would benefit from initial external donor support but should be strategically planned for a gradual handover to full regional funding by partner countries. The role of this disaster response readiness platform should have both existing and new roles:

- New target PEER countries, such as Afghanistan, Bhutan, Maldives, and Sri Lanka, would benefit from traditional PEER support in carrying out PEER trainings and helping them develop their own trainers.
- All PEER countries could benefit from regional and coordinated approach to creating high-quality virtual training formats and training protocols.
- All PEER countries would benefit from a disaster response readiness platform that facilitated regional collaboration through joint tabletop exercise, simulations, post-event lessons-learned workshops and similar.

- Some partner organizations in core PEER countries would benefit from a regional accreditation body. Such a body would provide external review of institutionalized trainings to verify consistent learning outcomes, regional standards in terminology and coordinated response, organizational instructor capacity, and inclusion of the latest best practice in trainings.
- All PEER countries would benefit from a regional response readiness platform that facilitated new course development. Such new course development should increasingly be led by experience partner organizations.
- Most PEER countries would benefit from a platform that helped high-level decision makers explore best practices in inter-agency and bi-lateral mutual aid memoranda of understandings.
- Most importantly, all PEER countries would benefit from a platform that championed disaster response readiness, and encouraged national and regional investment in training, research, and development.

# Annex 13: Statement of Work (SOW)

## Job Summary:

The Monitoring and Evaluation (M&E) Consultant will be responsible for the stated duties and responsibilities in connection with the **external evaluation process** of the Program for Enhancement of Emergency Response (PEER) Stage 4 (2014-2020).

## Main Task:

He/She shall evaluate the achievements and implementation of the PEER Stage 4 managed by NSET in the beneficiary countries; provide NSET with a comprehensive evaluation report of project results to date; and an assessment of the status of program implementation as per USAID/OFDA and NSET requirements.

## Specific Activities:

The M&E Consultant shall be based in Kathmandu, Nepal, with travel to the program's core beneficiary countries (Bangladesh, India, Nepal, Pakistan), for the duration of the work assignment, and shall perform the duties as warranted for by USAID/OFDA and NSET requirements, PEER scope and activities, including, but not limited to the following:

a. Conduct field site monitoring visits, surveys, interviews and prepare report on findings

   which will include but not limited to:

   - Progress against targeted outputs
   - Impacts/successes/achievements, identification of key gaps/issues/ challenges and

## lessons learned

   - Documentation of course of action/strategies/implementation changes made
   - Recommendations for remaining project term and vision beyond 2020.

b. b. Proper collection, recording, analysis, reporting and documentation of process and results using standard tools as approved by NSET.

c. c. Perform qualitative and quantitative data analysis and generate reports (with infographic, charts, maps, etc.).

d. d. Ensure that statistical monitoring reports are generated accurately and reflect the status of progress towards reaching the program targets, and are submitted in a timely manner to NSET and USAID/OFDA;
e. Perform other duties as determined by the NSET Executive Director/PEER Chief of Party and/or USAID/OFDA as needed.
f. Prior to commencement of the M&E process, the Consultant will submit an evaluation plan/workplan reflecting the approach and methodology, travel plan and an extended outline of the M&E report. He/She will commence the job after approval of the evaluation plan/workplan.

## Deliverables

The following is a set of evaluation deliverables, with the expected timing of each adhering to the above Evaluation Timeline.

1. An evaluation plan containing the proposed evaluation outline; the evaluation methodology, including draft data collection instruments; and an implementation schedule, to be delivered before the arrival of the Consultant in Nepal/before joining the team. Draft data collection tools shall be submitted for review and feedback by NSET.
2. An in-briefing/ presentation with NSET upon the Consultant's arrival in Nepal/joining the team.
3. A PowerPoint presentation to USAID/OFDA (and another to senior NSET management) of the preliminary findings, conclusions, and recommendations of the evaluation, for correction of errors of fact or interpretation, to be delivered within 7 weeks of the Consultant's arrival in Nepal/joining the team.
4. A draft evaluation report of not more than 25 pages in length, single-spaced in Gill Sans 11-point font, excluding annexes, with an executive summary of not more than
5. 2 pages in length, within 9 weeks of the Consultant's arrival in Nepal/joining the team.
6. A final evaluation report of not more than 25 pages in length, single-spaced in Gill Sans 11-point font, excluding annexes, with an executive summary of not more than
7. 2 pages in length, within 10 working days of receipt of consolidated comments in electronic format from NSET and USAID/OFDA.
8. All the quantitative data collected as part of this evaluation must be submitted as non-proprietary, machine-readable files to NSET and USAID/OFDA.

# Annex 14: List of PEER Trainings and Implementing Partner

## BASIC COURSES

Each basic course includes a Standard English Course and multiple adaptations for context and language, per needs of the partner organization

| Course Name | Acronym | Length | International Guidelines | In-Country Partner Organizations |
|---|---|---|---|---|
| Medial First Responder | MFR | 13 days | AHA Guidelines &IFRC Guidelines on First Aid | • BGD: Fire Service and Civil Defense (FSCD)<br>• IND: National Disaster Response Force (NDRF)<br>• NPL: Nepalese Army, Nepal Police, Armed Police Force<br>• PAK: Punjab Emergency Service (PES)/Rescue 1122 |
| Collapsed Structure Search & Rescue | CSSR | 8 days | INSARAG Guidelines | • BGD: FSCD<br>• IND: NDRF<br>• NPL: Nepalese Army, Nepal Police, Armed Police Force<br>• PAK: PES/Rescue 1122 |
| Community Action for Disaster Response | CADRE | 4 days | WHO Campaign for Safe Hospitals | • BGD: Bangladesh Red Crescent Society (BDRCS)<br>• IND: NDRF<br>• NPL: Nepal Red Cross Society and American Red Cross<br>• PAK: Pakistan Red Crescent |
| Hospital Preparedness for Emergencies | HOPE | 4 days | AHA Guidelines & IFRC Guidelines on First Aid | • BGD: Directorate General for Health Services<br>• IND: All India Institute of Medical Sciences<br>• NPL: Institute of Medicine- Tribhuvan University<br>• PAK: National Health Emergency Preparedness and Response Network |
| Swift Water Rescue | SWR | 5 days | Rescue 3 International | • Regional piloting in PEER 4; implementing partners not yet identified in all countries. |

## INSTRUCTOR DEVELOPMENT COURSES

| | Course Name | Acronym | Length | |
|---|---|---|---|---|
| MRF and CSSR | Training for Instructors | TFI | 5 days | Basics of adult education instruction skills |
| | Instructors' Workshops for MFR and CSSR | IW MFR/CSSR | ?? | Advanced content knowledge and how to teach it |
| | Master Instructors' Workshop | MIW | 5 days | Training on course coordination, management |
| HOPE | Training for Instructors HOPE | HOPE-TFI | 5 days | Instructor skills, content review |
| CADRE | Training for CADRE Instructors | CADRE-TFI & IW | 8 days | Instructor skills, content review |
| SWR | *In development* | | | |

# Annex 15: PARTICIPANT AND INSTRUCTOR SELECTION, BY PARTNER ORGANIZATION

| Country/ Partner Org/ Courses | Participants | Instructors |
|---|---|---|
| Initiative Outdoors<br><br>Pilot SWR | Young, many desk workers and senior officers.<br><br>Some issues with a few participants coming "for vacation" rather than for training. One trainee without swimming ability struggled with course, though instructors did all they could to support.<br><br>Needs better balance between desk workers who can support training adoption and institutionalization and future rescuers who are ready for the physical demands of SWR. | Unable to advance SWR instructor training and further SWR basic courses because of COVID. |
| Nepal<br><br>Tribhuvan Univ. Teaching Hospital<br><br>HOPE | Policy makers, directors, administrators, and emergency chiefs. Senior staff selected so they could go back and implement disaster management plans in their hospitals. Do not train anyone over 65 years old to reduce attrition rate.<br><br>About 70% of the HOPE graduates go on promote training and activities in their organizations. | Plenty of HOPE instructors interested in conducting course – enjoy content, enjoy the training approach of a retreat-like venue. Difficulty is finding funds to pay the many instructors necessary for a single course. |
| Nepal<br><br>Armed Police Force<br><br>MFR, CSSR | About 1700 PEER graduates out of 37,000 in the APF. Having only a single training school limits number of personnel that can be trained. | Using 9 instructors for 50 participants and 12 instructors when more than 50 participants.<br><br>Struggling to maintain enough instructors to match the needs of APF recruits and APF training facility capacity. |

| Country/ Partner Org/ Courses | Participants | Instructors |
|---|---|---|
| | | Relying upon NSET for instructor training; no institutionalized instructor training. |
| Nepal<br><br>Red Cross<br><br>CADRE | Select from NRCS chapter volunteers throughout country.<br>About 40-50% of their volunteers have completed CADRE training.<br><br>Use PEER age requirements. Ensure 33% are female and 40% are from female or socially excluded demographics. | Sufficient instructors to plan trainings.<br><br>Do have noticeable number of "drop-outs" – instructor trainees that take only one course or young people who may complete training, then migrate out of the rural and remote areas. |
| Nepali<br><br>Army<br><br>MFR, CSSR | Uses a quota for general recruits to take the PEER courses, such that all battalions have about 35% of the battalion soldiers are participating in one or more courses. About 60% of the specialized forces are participating.<br><br>Overall, 15% of the army is trained in disaster response capacity through PEER. | The Army has increased training for soldiers and struggles to maintain sufficient instructors. Instructor attrition often due to promotion. |
| Nepal<br><br>Police<br><br>MFR, CSSR, HOPE, CADRE, SWR | 7,800 responders<br><br>Police participate in CADRE training, but do not run this course. | Have 2 TFI trainings per year in each province. Currently have 319 instructors.<br><br>Participants in TFI "are drastically changed in their behavior." Being a trainer is part of police career advancement, so interest in becoming a trainer is high.<br><br>Some trained instructors retire, but still participate during disaster response. |
| Bangladesh | Doctors, nurses, and administrative staff in the public sector. Try to | Currently sufficient number of instructors for trainings being carried out, but not for |

| Country/ Partner Org/ Courses | Participants | Instructors |
|---|---|---|
| NIPSOM<br><br>HOPE | include participants from several administrative divisions.<br>A hospital committee selects staff participants, but PEER instructors invite female participants from other hospitals if male-female ratio does not meet 60:40.<br><br>Need different training for lower-level healthcare staff.<br><br>Only a tiny percentage of healthcare personnel are trained, insufficient coverage. Limitation is the PEER budget (thru ADPC) and the small class size.<br><br>No training in the private sector. | expansion. Also experiencing high instructor attrition. Trained doctors work in a hospital for 2-3 years, then get transferred. |
| Bangladesh<br><br>Red Cross<br><br>CADRE | 100% of volunteers trained with CADRE components. Volunteers are Red Crescent youth, equal gender representation.<br>Search and Rescue component of CADRE also taught to police, upon request. | Need PEER support in development more senior instructors. |
| Bangladesh<br><br>Fire Service and Civil Defense<br><br>MFR, CSSR | All recruits experience PEER CSSR and MFR content through the FSCD 12-month professional training course. | FSCD has lost several senior instructors due to death, moving, or reaching retirement age. Only 5-6 still active. All areas need more master instructors, with PEER support.<br><br>FSCD unable to initiate their own master training because the Army is authority and does not understand PEER, budget, and time limitations. It takes several years to develop senior instructors. |

| Country/ Partner Org/ Courses | Participants | Instructors |
|---|---|---|
| Pakistan<br><br>PES/Rescue 1122<br><br>MFR, CSSR, CADRE SWR | CADRE training open to whole community, with clear non-discrimination approach for gender, caste, creed or religion.<br><br>MRF training widespread to PES staff, other districts interested in initiating Rescue 1122, Army Medical Corp, and university students.<br>PEER basic courses fully aligned with Rescue 1122 mission.<br><br>Over 12,000 people have been trained in MFR and CSSR since 2007 and over 50,000 community volunteers trained in CADRE and organized into CERT teams in the Punjab. | PES has fully institutionalized training of their own instructors and other organizations using PEER TFI and IW instructor development series.<br><br>Have 11 master trainers. Some difficulty with instructor training personnel in remote areas or from the army personnel stationed at the border.<br><br>They also note that the do not yet have sufficient funding to develop regional MFR and CSSR instructors in other provinces of Pakistan. |
| Pakistan<br><br>NHEPRN<br><br>HOPE | NHEPRN invites hospitals to nominate a few representatives for training, usually a mix of doctors, nurses, paramedics and staff.<br><br>In major cities and capital, 7-8 staff per hospital are trained in HOPE.<br><br>Difficult to provide training to remote provinces because of a lack of adequate lodging, WHO funding restricts location due to security threats, and because it is expensive to bring remote participants to urban centers. | Several Pakistani instructors certified in HOPE in March 2020. |
| Pakistan<br><br>PRCS<br><br>CADRE | Community volunteers, leaders, stakeholders, and social workers. Gender balanced.<br><br>CADRE is an irregular offering that has only occurred in a few places, last in 2019. Part of community selection | Unclear whether trainer's workshop has occurred. |

| Country/ Partner Org/ Courses | Participants | Instructors |
|---|---|---|
| | is based upon engaging in a community exercise following training, a requirement that favors training in the capital because the exercise can then include a wider range of people from across the country. | |
| India<br><br>IMA<br><br>HOPE | For the first four HOPE courses, the Key Informant, through personal contacts, selected doctors interested in disaster management from across the country. | Instructors for past HOPE courses have been experienced doctors from other South or South Asian countries, which has piqued participant interest and improved dialogue and learning.<br>A couple doctors each HOPE training are interested in instructor training. However, a HTFI course has not been conducted. |
| India<br><br>National Disaster Response Force<br><br>MFR, CSSR, CADRE | Training of all NDRF personnel in MFR and CSSR courses, as well as two other content areas.<br>In the last two years, have started to induct female recruits into NDRF and, thus, PEER training.<br><br>CADRE is newly adopted training. Those trained in it are now training communities where they are stationed. These community programs are 15-day programs for community leaders, volunteers, school and university students. | Utilize instructors trained directly through PEER instructor course and instructors trained internally.<br><br>Potential instructors are selected based upon performance in basic courses.<br><br>Female instructors are beginning internal instructor training.<br><br>Struggles to continue to produce enough trainers to cover training for all of NDRF recruits. All NDRF members are part of the force for seven years, and then return to their home organization. They take the training and expertise back with them and train forces there. |

# Annex 16: Partner Organizations Institutionalization and Adaptation

| Country/ Partner Org/ Courses | PEER Course Content Institutionalization and/or Dissemination in other Formats |
|---|---|
| Nepal<br><br>Tribhuvan Univ. Teaching Hospital<br><br>HOPE | In addition to providing two HOPE courses a year, and a HTFI course every few years, Tribhuvan University Teaching Hospital has adapted HOPE course content for their students. Most students receive HOPE training content in their disaster management class. Nurses receiving a MBBS (Bachelor of Medicine and Bachelor of Surgery) take a course in HOPE vs Disaster course, based upon HOPE content.<br><br>The Armed Police Force also receive a 2-hour overview of HOPE in their disaster class and 1.5 of HOPE instructor training has been added to Armed Police Staff College curriculum. |
| Nepal<br><br>Armed Police Force<br><br>MFR, CSSR | According to the NDRRMA, the APF has fully institutionalized PEER courses in their own training. The APF says that all recruits participate in Basic Disaster Management training, a 13-week course. The course includes a 2-week introduction, MFR content, CSSR content, dead body management, firefighting, motor rescue and water rescue. After completion, personnel take advanced courses per their interest.<br><br>APF conducts a disaster risk awareness campaign in communities using some PEER content. |
| Nepal<br><br>Red Cross Society<br><br>CADRE | Nepal Red Cross offers 20-25 CADRE courses a year and partners with donors to conduct these trainings in all administrative areas of Nepal. They conduct 2-3 TFI courses a year.<br><br>No adaptation of CADRE material in other formats. |
| Nepali<br><br>Army<br><br>MFR, CSSR | The Army conducts more than a dozen PEER MFR and CSSR course a year.<br><br>The Army has also institutionalized content from these courses into their 6-week Disaster Management Course. PEER graduates teach this course and use PEER content from MFR and CSSR. All battalions have access to the Disaster Management Course, with about 15% of the Army having disaster response capacity. |
| Nepal<br><br>Police | The police have institutionalized TFI training and expanded it from a 5–7-day course to a 15-day course with additional content on |

| Country/ Partner Org/ Courses | PEER Course Content Institutionalization and/or Dissemination in other Formats |
|---|---|
| MFR, CSSR, HOPE, CADRE, SWR | budgeting and adult learning. They saw the TFI as profoundly impactful and beneficial to all senior officers.<br><br>Police officers with PEER training have also infused that knowledge into community policing activities, including holding trainings in the local schools for 9-10th graders and 12th graders, or organizing community classes or presentations on crime, engaging with police, and community support of police during incidents. |
| Bangladesh<br><br>NIPSOM<br><br>HOPE | NIPSOM seeks to open a Department of Disaster Management, which could produce more students with HOPE training. Funding and a mandate are needed.<br><br>NIPSOM has been instructed to incorporate HOPE into the SPO for education and, specifically, the curriculum for the Master of Public Health.<br><br>Through funding from the Ministry of Health and Family Affairs, NIPSOM developed and carried out 20 Emergency Preparedness and Response trainings (500 people, 3-day) in 2019. This training was for grass-roots level education, carried out by community clinics. They are working towards wider community clinic dissemination but struggling to engage with overwhelmed community health care providers. |
| Bangladesh<br><br>Red Cross Society<br><br>CADRE | Senior BDRCS staff feel that the CADRE curriculum is appropriate, especially as it provides consistent terminology and chain of command clarity for working with other responding organizations.<br><br>While in PEER 4, BDRCS was unable to host a PEER CADRE training because of financial delays, they have extensively incorporated PEER into their BDRCS program. They have broken CADRE into four stand-alone sessions, each 1-3 days long:<br><br>• Dead body management, 1-day training module<br>• SAR, 3-day training (include in flood resilience, and cyclone, and city rescue program)<br>• Fire safety, 1–2-day training<br>• Emergency response, 1 day often combined with other |
| Bangladesh | According to the In-Country Consultant, many NGOs are approaching the FSCD and asking for training for their members. The government and NGOs well recognize the way that FSCD has |

| Country/ Partner Org/ Courses | PEER Course Content Institutionalization and/or Dissemination in other Formats |
|---|---|
| Fire Service and Civil Defense<br><br>MFR, CSSR | adapted to lead disaster response training; the government is allocating funds for equipment purchase.<br><br>Key Informants from FSCD noted that they are "conducting so many trainings al over Bangladesh." Much of their training is for managers in the 8,000 active garment companies.<br><br>FSCD has also used PEER-based content to develop a 3-day, urban disaster management program. The participants are ward volunteers in three mega cities. The goal is to train 62,000 volunteers countrywide. From 2015 to present they have increase from 30,000 to 47,000 volunteers. Content includes PEER's CSSR content and first aid from MFR. FSCD enhances this content with firefighter training.<br><br>FSCD has instructions from the Ministry of Education to incorporate some fire incident awareness and based disaster rescue concepts into public school curriculum, specifically in grade 5 and 10. This content is "collected from the PEER series." |
| Pakistan<br><br>PES/Rescue 1122<br><br>MFR, CSSR, CADRE SWR | The In-Country Consultant noted that PES/Rescue 1122 has full adopted and institutionalized the MFR, CSSR, and CADRE courses and is teaching them per PEER training standards. They prioritize PEER-trained instructors as training coordinators or senior instructors.<br><br>As Rescue 1122 has expended from simply being an ambulance service to also providing firefighting service, search and rescue, water rescue, and swift water rescue, they have added components to their staff training. Several of these components draw directly from PEER courses.<br><br>Beyond these training courses to staff and community volunteers, PES/Rescue 1122 has taken a regional leadership role in disaster response training. Other countries are looking to them for support in gaining UNISARAG certification. Their training facilities is available for regional training. And, through the SAARC forum, they have organized a rescue challenge, with teams from Bangladesh participating. |
| Pakistan<br><br>NHEPRN | In Islamabad, a few hospitals have adapted HOPE training, shortening it to a 2- or 3-day training for their staff.<br><br>As of July 2021, NHEPRN is in discussions with university stakeholders, such as vice-chancellors of the university and principals of the medical |

| Country/ Partner Org/ Courses | PEER Course Content Institutionalization and/or Dissemination in other Formats |
|---|---|
| HOPE | colleges, to incorporate HOPE content in the medical education and undergraduate curriculum for health-related fields. Undergraduate curriculum is expected to be not fully cover al elements of HOPE, but teach concepts related to disaster, epidemic, biomedical hazards. It will allow students and graduates to respond effectively and in a coordinated way during disaster.<br><br>During the COVID-19 pandemic, NHEPRN arranged for 5 online refresher courses. They used the opportunity to outreach to all graduates, refresh their memory and impact pandemic safety precautions. These online refresher courses had "overwhelming participation" in the asynchronous review of theoretical knowledge. They plan to continue some form of online refresher even after the pandemic, and perhaps hybrid approaches to HOPE training. |
| Pakistan<br><br>PRCS<br><br>CADRE | PRCS has established a working group to consider how to best incorporate CADRE course content into their existing PRCS curriculum. They are involving personnel from disaster management, health, first aid, and youth volunteers in this institutionalization process. |
| India<br><br>IMA<br><br>HOPE | The IMA has struggled to entice participation in the traditional HOPE course. About 75% of the health care workers are in private practice and are unwilling to participate in a 5-day course on disaster response. Disasters are seen as rare or improbable events, 5 days is viewed as too impactful on patients, and the cost associated with travel and lost revenue is seen as prohibitive.<br><br>The IMA is adapting a shortened 3-day HOPE training using PEER trainers and the same participant to instructor ratio. The HOPE course is also split into two parts, with each part conducted a month apart. Each part is 1.5-2 days, also allowing for some travel time.<br><br>This adaptation, while not ideal, addresses real constraints and makes the training more palpable for private sector workers who do not have their costs covered by PEER or government.<br><br>Additionally, IMA is adapting disaster management training for less engaged participants. They have piloted a 3-stage process:<br>3-hour awareness program for up to 100 participants<br>1-day training in disaster management (3 events to date) |

| Country/ Partner Org/ Courses | PEER Course Content Institutionalization and/or Dissemination in other Formats |
|---|---|
| | 3-day HOPE training<br><br>They also are considering the development of an online course in disaster management that could support or replace some or all of the in-person awareness or training programs. Currently, online courses are not recognized by universities, which limits the appeal of such online courses. Other challenges being considered are how to provide practical application opportunities; trained IMA members may be able to provide face-to-face practicums. |
| India<br><br>National Disaster Response Force<br><br>MFR, CSSR, CADRE | PEER courses are fully institutionalized into basic training for all NDRF personnel. Training is carried out at four NDRF institutions, with instructors having received their training from PEER instructors. NDRF also provides training to the State Disaster Response Forces, Civil Defense, and some voluntary organizations. Based upon the participation of for NDRF personnel in the piloting of SWR training, they now are conducting SWR training through the Institutes.<br><br>In institutionalizing PEER courses, NDRF has lengthened the instructor training to a month-long course. This TOT course combines PEER's TFI and MIW content, advanced technical content, as well as content on how to give lectures and prepare for them.<br><br>They have also slightly increased the number of participants in basic courses from 24 to 30, occasionally more. They no longer limit instructors to those having been trained in a PEER course. Rather, they utilize their own internally trained instructors as well. They have seen a maintenance of standards and knowledge acquisition, suggesting that these changes are acceptable adaptations.<br><br>The duration of courses has also been adapted. Rather than have intensive courses, instructors work with their personnel to complete the training in and around disaster response deployment.<br><br>During the COVID-19 pandemic, they adapted even further. Rather than bring NDRF units to the large, centralized training institutes, they treated the unit as the training center. Theoretical content was conducted through online courses, but practical elements were conducted within a unit, with local instructors providing supervision. Units were geographically isolated from the outside world, so in-person training could occur with limited risk. |

| Country/ Partner Org/ Courses | PEER Course Content Institutionalization and/or Dissemination in other Formats |
|---|---|
| | According to the In-Country Consultant, PEER 4 has supported the NDRF in a "very systematic" adaptation of PEER courses through provision of "latest literature and support of the modification and adaptation" of courses" such that course modification is now a strength of the NDRF. The PEER 4 program has "capacitated NDRF to develop new courses and adapt it to new disasters like heat and cold waves, thunder and lightning."<br><br>A next step being contemplated is the institutionalization of PEER courses in the basic training for the four paramilitary forces -- 1. Central Industrial Security Force, 2. Border Security Force, 3. Central Police Reserve Force, and the 4. Indo-Tibetan Border Police – from which the NDRF are selected. This step has been suggested, but not yet initiated. |

# Annex 17: Documents Reviewed

1. 170920 Final_PEER-4 ME Plan in line with August OFDA M&E comments.docx
2. 070913 FINA PEER II M&E Report.pdf
3. 08122014FinalReportPEER3Obj
4. Final 8Dec 2014.pdf
5. 140529 Final Revised M&E Report submitted to NSET.pdf
6. PEER country status reports, various
7. Brochure PEER IV_2018_3.pdf
8. PEER Events Database
9. EMDAT database of historical disasters, 1990-2020 for Bangladesh, India, Nepal, and Pakistan

# Annex 18: Persons and Organizations Interviewed

| Country | Date | Organization | Individual, Title | Role | Relevant PEER Courses | Format/ Length |
|---|---|---|---|---|---|---|
| Nepal | 10 Aug 2020 | Initiative Outdoors | Mr. Chandra Ale, Founder | Instructor | SWR Course Development | |
| Nepal | 11 Aug 2020 | Tribhuvan University Teaching Hospital | **Prof. Dr. Pradeep Vidya**, Director, Department of Information Technology IoM-TU/Professor/Chief, GI & HPB Surgery, Department of Surgery | HOPE Course Developer; HOPE Focal Program Coordinator in Nepal | Partner organization for HOPE | |
| Nepal | 12 Aug 2020 | Armed Police Force | **Mr. Amvika Prasad Joshi**, DSP, Camp Commandant at APF school at Kirtipur | Instructor | Partner organization for MFR, CSSR | |
| Nepal | 13 Aug 2020 | Nepal Red Cross Society | **Ms. Arya Regmi**, Program Coordinator | Instructor | Partner organization for CADRE | |
| Nepal | 13 Aug 2020 | Nepal Army | **Lt Col Shrijan Bahadur Malla,** Director of Disaster Management Directorate, Nepali Army | | Partner organization for MFR and CSSR | |
| Nepal | 28 Aug 2020 | National Disaster Risk Reduction Management Authority | Mr. Beda Nidhi Khanal, Undersecretary<br>**Mr. Anil Pokharel**, Chief Executive Office | | Nodal Agency | |
| Nepal | 13 Nov 2020 | Nepal Police | Mr. Arjun Timilsina, DSP | Senior Instructor CSSR and MFR | Partner organization for MFR, CSSR, | |

| Country | Date | Organization | Individual, Title | Role | Relevant PEER Courses | Format/ Length |
|---|---|---|---|---|---|---|
| | | | | | HOPE, CADRE, SWR | |
| Bangladesh | 2 Nov 2020 | NA | Mr. Muhammad Saidur Rahman | In-Country Consultant | | |
| Bangladesh | 13 Sept 2020 | National Institute of Preventive and Social Medicine (NIPSOM) | Prof. Dr. Baizid Khoorshid Riaz, Director<br>**Prof. Dr. Md. Ziaul Islam PhD,** Head, Dept. of Community Medicine | Senior HOPE Instructor | Partner organization for HOPE | |
| Bangladesh | 16 Sept 2020 | Bangladesh Red Crescent Society (BDRCS) | **Mr. Md. Rafiqul Islam,** Deputy Secretary General of BDRCS<br>**Mr. Ekram Elahi Chowdhury,** Director of Training and Unit Affairs, Dept of BDRCS | Instructor | Partner organization for CADRE | |
| Bangladesh | 30 Sept 2020 | Bangladesh Red Crescent Society (BDRCS) | **Ms. Sabina Yasmin**, Deputy Director | Senior Instructor | Partner organization for CADRE | |
| Bangladesh | 1 Mar 2021 | Fire Service and Civil Defense (FSCD) | **Mr. Md Abdul Momen**, Assistant Director for Training | Senior Master Instructor CSSR | Partner organization for CSSR, MFR | |
| Pakistan | 27 Apr 2021 | NA | Mr. Falak Nawaz | In-Country Consultant | | |
| Pakistan | 25 Jun 2021 | Emergency Services Academy, Rescue 1122 | Dr. Rizwan Naseer, Director General | All first-generation PEER graduates, | Partner organization for | |

| Country | Date | Organization | Individual, Title | Role | Relevant PEER Courses | Format/ Length |
|---|---|---|---|---|---|---|
| | | | **Dr. Muhammad Farhan Khalid,** Registrar / Team Leader, DRF-PAK<br><br>**Ms. Roqiya Bano Javed,** Controller Examination<br>Emergency Services Academy<br><br>Mr. Muhammad Ahsan, Head Of Safety Wing | region instructors and course coordinators | MFR, CSSR, CADRE SWR | |
| Pakistan | 30 Jun 2021 | National Health Emergency Preparedness and Response Network (NHEPRN) | **Dr. Syed Fhd Shah,** Assoc. Prof. Surgery Federal General Hospital | Senior HOPE instructor | Partner organization for HOPE | |
| Pakistan | 6 Jul 2021 | National Disaster Management Authority (NDMA) | **Honorable Brigadier Waseem Uddin,** Member (Operations), NDMA, Prime Minister's Office<br><br>**Mr. Kazim Rahim**<br>DPM (Ops), NDMA,<br>Prime Minister's Office | NA | Nodal Agency | |
| Pakistan | 9 Jul 2021 | Pakistan Red Crescent Society (PRCS) | **Mr. Abaidullah Khan,** Joint Director (Operations) | Instructors? | Partner organization for CADRE | |

| Country | Date | Organization | Individual, Title | Role | Relevant PEER Courses | Format/ Length |
|---|---|---|---|---|---|---|
| | | | **Mr. Muhammad Atif Khan,** Azad Jammu and Kashmir (AJK) State Program Coordinator<br><br>**Ms. Asima Nasim** Program Manager, DM | | | |
| India | 13 Jul 2021 | | Prof. Vinod Kumar Sharma | In-Country Consultant | | |
| India | 20 Jul 2021 | Indian Medical Association (IMA) | **Dr. Chetan Patel,** President IMA, Gujarat State Branch | Senior Instructor | Partner organization for HOPE | |
| India | 12 Aug 2021 | National Disaster Management Authority | **Brigadier Ajay Gangwar**, Advisor (Ops & Communications) | Senior Instructors | Nodal Agency | |
| India | 17 Aug 2021 | National Disaster Response Force (NDRF) | **Mr. Pankaj Kumar**, Commandant, NDRF Academy<br>**Mr. Pranshu Srivastava**, Deputy Commandant, HQ NDRF | | Partner institution for MFR, CSSR, CADRE, SWR courses | |

# Annex 19: Data Collection Instrument

PEER M&E INTERVIEWS- PARTNER ORGS/INSTRUCTORS

Date and Time

Interviewee(s):

Org:

Thank you for doing this interview with me. I'm looking forward to hearing about your experiences with PEER.

Just so I have a sense of your organization:

How long has your organization been partnering with PEER?

**IR1 Enhance capacity of PEER Country partnering institutions thru standardized training/courses**

## O1-1 # peer trainings conducted (70)

In the last several years, about how many PEER courses have you conducted for **your staff**?

| Organization | **MFR** (13days) | **CSSR** (8day) | TFI for MFR &CSSR (5day) | **IW** for MFR (5day) | **IW** for CSSR (7day) | **HOPE** (4day) | TFI for HOPE (5 day) | **CADRE** (4day) | TFI/IW for CADRE (8day) | **SWR** (5 day) | MIW generic?? (5 day) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | |

Prior to the development of these PEER courses, did your organization have any similar training? Or, did your members ever get similar training elsewhere, in South Asia or internationally?

Why is this training important? What would disaster and emergency response look like if people didn't have this training?

### O1-2 # people trained in preparedness, mitigation, and management; sex disaggregated (1,058)

Now let's talk about the participants and instructors for this training.

#### Participants

How are participants for the basic course selected?

What's the percentage of female trainees, approximately?

Overall, what percentage of the people in your organization have taken a PEER course? Is that sufficient for responses during emergencies?

#### INSTRUCTORS:

Are you finding enough people interested in becoming instructor? Why or why not?

### O1-3 # people passing final exams/certificates, sex disaggregated (80%) Instructors trained (320) Course grads (1058)

### 1.1. % Trained who retain 60% skills and knowledges after 2 months (60%)

Is there any way that graduates from your organization are periodically assessed for PEER course knowledge and skills, just to see if they are retaining their knowledge? How long does certification last?

Have you seen PEER graduates and/or trainers use skills they learned in PEER for better response and coordination during emergencies? Can you give me some examples?

### O1-4 # Country planning meetings and workshops

NA for partner orgs and instructors

### O1-5 # new PEER curricula developed, adapted, and piloted (4)

NA for partner orgs and instructors

## IR2 Institutionalization of PEER courses in partnering institutions

### O2-1 # institutions receiving PEER database with training on operation mechanism (4)

NA

### 2.1. # Partner institutions that maintain and continue database of information on courses, participation, and instructors (4

How do you track training events, personnel, and certification?

- What do you use this information for?
- How consistently, if at all, is this tracking data shared with PEER?

Is there any value in having a regional database of PEER trainings, instructors, and graduates?

### O2-2. # Training courses under PFAP support (fund sharing), conducted by partnering training institutions (40, 10 in each)

In what ways has your organization engaged in cost-sharing or in-kind donation for PEER courses (PFAP)?

- About what % does your organization contribute?

- Are certain courses easier to do cost sharing and why?

### 2.2. # Partner institutions with established system of plan, program and budget to conduct PEER-adapted courses (4)

One of the future visions of PEER is for partner organizations to adapt and internalize PEER courses and standards into their own organization's training programs.

Has your organization adapted pieces of the PEER course content into other orientations, training, or education programs?

| PEER Course | Adapted Y/N | Comments |
|---|---|---|
| MFR: Medical First Responder: | | |
| CSSR: Collapsed Structure Search and Rescue: | | |
| HOPE: Hospital Preparedness for Emergencies: | | |
| CADRE: Community Action for Disaster Response: | | |
| SWR: Swift water rescue: | | |

What kinds of adaptations or changes did you make (content, length, equipment used, ratio of participant to instructor)?

Do you have any formal or informal ways you are evaluating this adapted course or the instructors?

What percentage of your organization has taken these adapted, in-house trainings?

IF NOT ADDRESSED ALREADY: Has anything limited the institutionalization of PEER training in your organization?

Has PEER involvement changed anything else – such as plans and procedures – in your organization?

## IR3 Strengthened coordination and sharing among emergency response organizations in S Asia

### O31. Regional meetings/conferences conducted (3)

NA for partner orgs and senior instructors

### 3.1 # formal or informal process/platforms established for sharing among PEER grads

### O 32. # Contacts made with organizations in the new expansion countries

NA for partner orgs and senior instructors

## OVERALL ASSESSMENT AND IMPACTS

**PEER's first objective is to enhance partner institution capacity through standardized training/courses.** On a scale from 1 to 10, where 1 is terrible and 10 is outstanding, how well do you personally think PEER is doing with enhancing partner institution capacity through PEER trainings and courses?

Why?

**PEER's second objective is support institutionalization of PEER courses in partner institutions.** On a scale from 1 to 10, where 1 is terrible and 10 is outstanding, how well do you personally think PEER is doing with institutionalizing courses in partner institutions?

Why?

**PEER's last objective is to strengthen South Asian regional coordination among emergency response organizations.** On a scale from 1 to 10, where 1 is terrible and 10 is outstanding, how well do you personally think PEER is doing?

Why?

What do you think are the three most important changes that PEER has brought to the region?

What are the two or three largest issues that PEER still needs to address?

Thank you so much for this interview. Before we finish, I want to ask, Is there anything else I am missing? Is there anything more I need to understand?

### Appendix H. Data Utilized in the Evaluation

All interview responses have been transcribed. For comprehensiveness, responses were then entered into a spreadsheet organized by interview question and response organization. See separate spreadsheet for data utilized in the evaluation.

## Appendix I. Unresolved Issues from Evaluation Review

Exact numbers of institutionalized training graduates, especially in the paramilitary and security forces, was not determined.

## Appendix J. Acronyms

| | |
|---|---|
| APF | Armed Police Force of Nepal |
| BDRCS | Bangladesh Red Crescent Society |
| BHA | Bureau for Humanitarian Assistance |
| CADRE | Community Action for Disaster Response |
| CSSR | Collapsed Structure Search and Rescue |
| DRR | Disaster Risk Reduction |
| FSCD | Bangladesh Fire Service and Civil Defense |
| HOPE | Hospital Preparedness for Emergencies |
| IMA | Indian Medical Association |
| MFR | Medical First Responder |
| NDMA | National Disaster Management Authority (Pakistan or India) |
| NDRF | Indian National Disaster Response Force |
| NDRRMA | Nepal National Disaster Risk Reduction Management Authority |
| NHEPRN | Pakistan National Health Emergency Preparedness and Response Network |
| NIPSOM | Bangladesh National Institute of Preventive and Social Medicine |
| NRCS | Nepal Red Cross Society |
| NSET | National Society for Earthquake Technology-Nepal |
| PEER | Program for Enhancement of Emergency Response |
| PES | Pakistan Emergency Services |
| PRCS | Pakistan Red Crescent Society |
| SWR | Swift Water Rescue |
| USAID | United States Agency for International Development |

# Annex 20: PEER Project Team and Staff (PEER Stage 4)

## PEER-affiliated staff with full-time involvement

| | |
|---|---|
|  | **Dr. Amod Mani Dixit**<br>Chief of Party<br>Tenure: 2014-2021<br>E-mail: adixit@nset.org.np |
|  | **Ms. Maritess R. Tandingan**<br>Deputy Chief of Party<br>Tenure: 2014-2021<br>E-mail: mtandingan@nset.org.np |
|  | **Dr. Ganesh Kumar Jimee**<br>Lead Trainer<br>Tenure: 2014-2021<br>Email: ganesh710@gmail.com |

| | |
|---|---|
|  | **Mr. Sanju Sharma**<br>Project Coordinator<br>Tenure: 2014-2021<br>Email: ssharma@nset.org.np |
|  | **Mr. Sanjeev Ram Vaidya**<br>Information Management Specialist<br>Tenure: 2014-2021<br>Email: svaidya@nset.org.np |
|  | **Mr. Bishal Raj Gurung**<br>Training Course Materials Specialist<br>Tenure: 2014-2021<br>Email: bgurung@nset.org.np |
|  | **Ms. Manisha Pantha**<br>Training Course Materials Specialist<br>Tenure: 2016-2021<br>Email: mpantha@nset.org.np |

| | |
|---|---|
|  | **Mr. Aditya Tamang**<br>Training Course Materials Specialist<br>Tenure: 2016-2021<br>Email: adityatamang@nset.org.np |
|  | **Mr. Kamal Raj Gurung**<br>Accounts Assistant<br>Tenure: 2014-2021<br>Email: kgurung@nset.org.np |
|  | **Mr. Bijendra Shrestha**<br>Information System Officer<br>Tenure: 2015-2021<br>Email: bshrestha@nset.org.np |
|  | **Ms. Sajana K.C.**<br>Training Course Materials Specialist<br>Tenure: 2015-2018<br>Email: |

| | |
|---|---|
|  | **Mr. Shiva Khadka**<br>Admin Assistant<br>Tenure: 2016-2018<br>Email: |

## PEER-affiliated staff with partial involvement

| | |
|---|---|
|  | Mr. Surya Narayan Shrestha<br>DRRM Expert<br>Tenure: 2021<br>Email: sshrestha@nset.org.np |
|  | Mr. Tika Sharma<br>Director, Finance<br>Tenure: 2014-2016<br>Email: tsharma@nset.org.np |

| | |
|---|---|
|  | Mr. Suvarn Prasad Gautam<br>Finance Manager<br>Tenure: 2016-2021<br>Email: suvarngautam@nset.org.np |
|  | Mr. Ranjan Kumar Ghimire<br>Accounts Officer<br>Tenure: 2014-2016<br>Email: |
|  | Mr. Chandan Dhoj Rana Magar<br>Graphics/Web Designer<br>Tenure: 2020-2021<br>Email: cranamagar@nset.org.np |
|  | Ms. Nisha Shrestha<br>Monitoring & Evaluation Manager<br>Tenure: 2016-2021<br>Email: nshrestha@nset.org.np |

| | |
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