Government of Nepal
Ministry of Health and Population

A Report on:

National Workshop on collaboration between Public health, Nepal Army, Nepal Police and Armed Police Force to strengthen Health Emergency Preparedness

February 2024

Supported by

World Health Organization

Nepal


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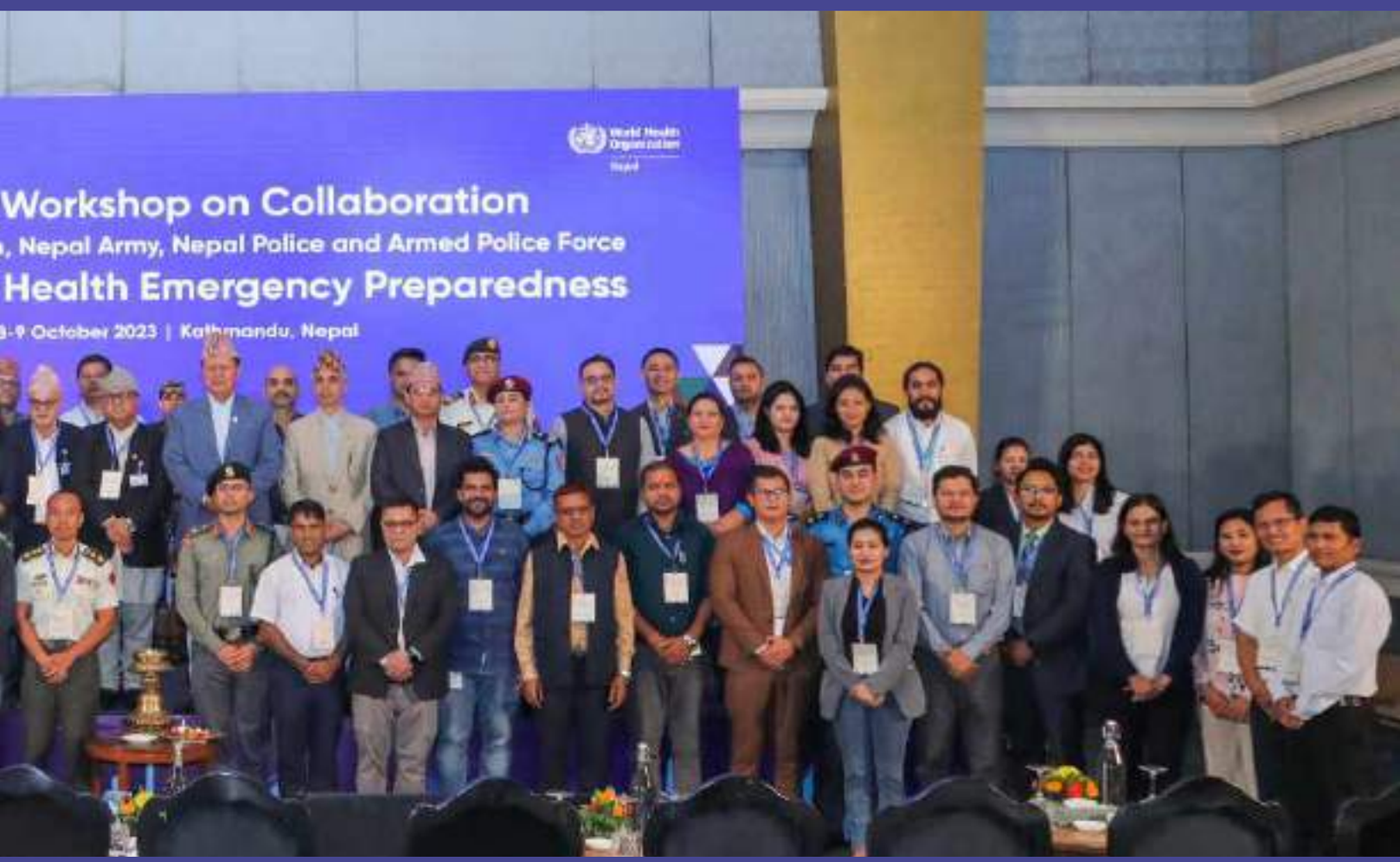
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Health Emergency Preparedness
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MESSAGE

First and foremost, I want to express my sincere gratitude to the team from Ministry of Health and Population for successful completion of the workshop on collaboration between Public Health, Nepal Army, Nepal Police and Armed Police Force. Dedication from you all to this cause is truly commendable, and it reflects our collective commitment to strengthening our nation's preparedness and response to health emergencies.

Nepal faces numerous challenges, primarily due to its vulnerability to natural disasters and recurrent infectious disease outbreaks. The importance of civil-health security collaboration in health emergencies cannot be overstated. A vivid example of this coordinated effort was seen during the devastating earthquake of 2015, where seamless collaboration between national and international security forces, along with healthcare workers, was instrumental in saving lives. Similarly, during the COVID-19 pandemic, we witnessed the critical role of a multi-sectoral coordination center involving health, non-health, and security forces. This center was pivotal in managing and controlling the spread of the virus, underscoring the necessity for effective collaboration between health and non-health actors, specifically our security forces, in preparing for and responding to health emergencies. Therefore, security forces should be integral partners in our emergency planning. The successful completion of this workshop marks the beginning of our journey to implement all priority actions, institutionalize our existing collaborations, and formulate joint activities, an immediate work plan, and a roadmap for the future. This is a significant milestone for our country's health emergency preparedness, as we bring together stakeholders from various ministries, government levels, agencies, and sectors, all with the common goal of enhancing our preparedness and response to public health risks and threats.

In conclusion, based on our past experiences in disaster and public health response, national and international recommendations, and our own national guidelines, it is imperative that we continue to organize joint workshops between civilian (health) and security sectors. I extend my sincere thanks to the World Health Organization for their unwavering support, as well as to the Ministry of Defense, Ministry of Home Affairs, Nepal Army, Nepal Police, Armed Police Force, Department of Food Technology and Quality Control, and Central Veterinary Laboratory for their active involvement throughout this first collaboration process. The Ministry of Health and Population is committed to continued collaboration in crucial endeavor related to health emergencies and disaster.

Dr Roshan Pokhrel
Secretary

World Health Organization
Nepal

Message

The World Health Organization Country Office for Nepal extends its sincere congratulations to the Ministry of Health and Population on the successful completion of the National Workshop on collaboration among Public health, Nepal Army, Nepal Police and Armed Police Force to strengthen Health Emergency Preparedness through implementation of Cross-Sectoral Health Security Mapping (CMAP) Tool. The workshop is a historic landmark in bolstering coordination and cooperation for health emergency preparedness in Nepal.

Globally, the significance of partnering with security agencies in responding to infectious disease outbreaks was underscored during the Ebola crisis in West Africa (2014-2016) and the Zika virus outbreak in 2016. Nepal has similarly faced considerable challenges over the past decade, including devastating earthquakes and the COVID-19 pandemic, where effective response required collaboration among the said stakeholders, and more.

Given the lessons drawn from these experiences, which underscored the pressing need for a comprehensive and multisectoral approach to disaster and public health emergency management, this workshop has brought into focus the vital importance of collaboration between civil and security entities in enhancing preparedness, response, and recovery endeavors. Through intentional partnerships, there is resource facilitation, expertise and capability sharing, which in turn benefits the affected population.

The CMAP tool, with a noteworthy outcome that has emerged from this collaborative endeavor between the MoHP and WHO, played a pivotal role in pinpointing opportunities for preparedness capacity strengthening and where cross-sectoral collaboration can yield the most significant impact, thereby significantly contributing to the effective implementation of the International Health Regulations (IHR) (2005).

Moreover, this workshop's achievements contribute to the foundation to further bolster disaster and public health emergency preparedness towards a multi-sectoral, whole-of-society approach.

I express my deep appreciation for the invaluable contributions of the Ministry of Health and Population; Ministry of Defense; Ministry of Home Affairs: Ministry of Education, Science and Technology; Ministry of Agriculture and Livestock Development; Ministry of Federal Affairs and General Administration and other pertinent provincial ministries, whose efforts were integral to the success of this workshop. I also extend my gratitude to colleagues in WHO headquarters, regional office and country office for Nepal for their steadfast support.

WHO reaffirms its unwavering commitment to assist Nepal in strengthening its preparedness, readiness and response capacities to address health needs arising from all types of disasters and public health emergencies.

Dr Rajesh Sambhajirao Pandav
WHO Representative to Nepal
10 June 2024

Abbreviations And Acronyms

APF	Armed Police Force
BSP	Biosecurity and Health Security Protection
CBRN	Chemical, Biological, Radiological and Nuclear
CCMC	COVID-19 Crisis Management Center
CMAP	Cross-sectoral Health Security Mapping (Tool)
CPI	Country Preparedness and IHR
CVL	Central Veterinary Laboratory
DEOC	District Emergency Operation Center
DFTQC	Department of Food Technology and Quality Control
DLS	Department of Livestock Services
DoHS	Department of Health Services
DREE	Disaster Response Exercise and Exchange
DRR	Disaster Risk Reduction
DRRMA	Disaster Risk Reduction and Management Act
EDCD	Epidemiology and Disease Control Division
EMT	Emergency Medical Team
EOC	Emergency Operation Center
EOMS	Educational Organizations Management System
GPW13	Thirteenth General Programme of Work
HEOC	Health Emergency Operations Center
HEPR	Health Emergency Preparedness, Response and Resilience
IAR	Intra-action Review
ICU	Intensive Care Unit
IHR	International Health Regulations
INB	Intergovernmental Negotiation Body
ISARAG	International Search and Rescue Advisory Group
JEE	Joint External Evaluation

MoD	Ministry of Defense
MoFA	Ministry of Foreign Affairs
MoH	Ministry of Health
MoHA	Ministry of Home Affairs
MoHP	Ministry of Health and Population
MoU	Memorandum of Understanding
NAPHS	National Action Plan for Health Security
NAST	Nepal Academy of Science and Technology
NCF	National Collaboration Framework
NEOC	National Emergency Operation Center
NGO	Nongovernmental Organization
NHEICC	National Health Education, Information and Communication Center
NPHL	National Public Health Laboratory
PEOC	Provincial Emergency Operation Center
PHEOC	Provincial Health Emergency Operation Center
PHE	Public Health Emergency
PPMD	Policy, Planning and Monitoring Division
QSRD	Quality Standard and Regulation Division
RCCE	Risk Communication and Community Engagement
SARI	Severe Acute Respiratory Illness
SEARO	Regional Office for South-East Asia
SOP	Standard Operating procedure
SPAR	State Party Self-assessment Annual Report
STAR	Strategic Toolkit for Assessing Risks
TUTH	Tribhuvan University Teaching Hospital
UN	United Nations
UNOPS	United Nations Office for Project Service
WGIHR	Working Group on IHR
WHA	World Health Assembly
WHE	World Health Emergencies
WHO	World Health Organization

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Background

Nepal is a landlocked country bordered by China in the north and India in the south, east and west. After enduring civil unrest for over a decade, Nepal entered its journey into a federal republic democratic system in 2015 (AD). Nepal has one federal government, seven provincial governments, 77 districts as administrative units and 753 local level governments (six metropolitans, 11 sub-metropolitans, 276 municipalities and 460 rural municipalities).

Nepal occupies an area of 147 181 square kilometres covering a wide range of geographical areas from both high Himalayas to the north and plain land in the south. The wide range of this geographical diversity has led Nepal to a highly vulnerable state exposed to multiple hazards and high prevalence of natural disasters. The complex geography of the country along with heavy monsoon rainfall seasons acts as the major cause for geological and hydro-metrological hazards across the country such as landslides, floods and catalysts for outbreaks for various infectious diseases. Further, the country also suffers from the effects of climatic changes.

Nepal is also at high risk for earthquakes as within it lies in one of the active continental collision zones of the world. Historical data give evidence of the occurrence of destructive great earthquakes in the past, with the recent one of 2015 causing over 8000 deaths. The National Earthquake Monitoring and Research Center, Department of Mines and Geology, reports that 213 807 earthquakes have been recorded by the centre by the end of 2017.

In addition to these natural hazards, Nepal is perilous for infectious disease outbreaks. The COVID-19 pandemic resulted in 1 001 143 confirmed cases causing 12 020 deaths. The annual report of the Department of Health Services (DoHS), for the fiscal year 2078/79 (BS) (2021/22), reports two cholera outbreaks, in Kapilvastu and Kathmandu Valley. A total of 1914 cases of acute diarrhoeal disease had occurred in Kapilvastu with 21 stool samples tested positive for stool culture for Vibrio cholerae. In Kathmandu Valley, 30 cases of cholera were reported across various locations distributed in Kathmandu, Lalitpur and Bhaktapur districts. Besides, the increasing trend of dengue cases have also been observed in recent years. Along with these outbreaks, various communicable diseases with potential to cause outbreaks such as malaria, kala azar and scrub typhus have been increasingly reported across the country.

These data and trends show that the country is at high risk for both natural hazards and public health emergencies (PHEs). The Government of Nepal led by the Ministry of Home Affairs (MoHA) with the “all hazards” approach and multisectoral involvement is continuously working for mitigation and prevention of effects of these events along with strengthening the preparedness activities for effective and efficient response.

Introduction

Nepal is one of the more disaster-prone countries as it is at risk from natural hazards along with recurrent outbreaks of infectious diseases. The Disaster Risk Reduction National Strategic Plan of Action (2018–2030) reports that more than 40 000 people lost their lives due to various disasters during 1971–2015 and more than 75 000 people were injured and about 3 000 000 were affected in the same period. In most of the districts of Nepal, disasters occur repeatedly, where more than 90% of the population is at high-risk of death due to two or more types of disasters.

In the past decade, Nepal has faced two major disasters, one of them being the earthquake of 2015, which resulted in over 8856 reported deaths and more than 22 309 injuries, and the other being the COVID-19 pandemic, which has affected morethan 1 001 470 people and resulted in 12 020 deaths. Both these events have revealed the areas that require improvements in the country's overall systems and plans in disaster preparedness and response, more precisely the coordinated preparedness and response to public health events. The effort from the country following these events however have ultimately aided in strengthening country's capacity in preparedness and response readiness to disaster and public health events, which is more sectoral.

One of the major observations and learning from both events is the need for adopting a multisectoral and holistic approach in preparedness as well as response. During the response to earthquake 2015, a coordinated effort for onsite search and rescue from security forces (national as well as international) and subsequent treatment of casualties from health force was needed and delivered. Even during the response to the COVID-19 pandemic, a multisectoral coordination centre involving health, non-health and security forces as the COVID-19 crisis management coordination centre was formed for unified operations and management for control, prevention, diagnosis and treatment of COVID-19 cases. These events have shown the need for a unified and coordinated effort from the health and non-health sectors including security forces for preparedness and response to disaster and public health events.

Various legal frameworks have been developed in Nepal for coordinated management of disasters and PHEs. The Disaster Risk Reduction and Management Act (DRRMA), 2074 (BS) was developed followed by the National Disaster Response Framework, 2075 (BS) and National Disaster Risk Reduction Strategic Plan, 2018–2030 (AD).

The DRRMA sets the foundation for disaster risk reduction (DRR)-related activities in Nepal, which has defined the roles and responsibilities of involved stakeholders along with coordination mechanisms for preparedness and response related to disaster and PHEs.

The framework and strategic plan act a guide for planning activities related to DRR with its objectives aligning with the Sendai Framework for Disaster Risk Reduction (2015–2030). The DRRMA is further supported by the Public Health Service Act, 2075 (BS) and Public Health Service Regulation, 2078 (BS). These Acts focus on management for the PHEs. Both these legal documents have acknowledged the need for a multisectoral approach for disaster and management of PHEs.

Development on cross-sectoral collaboration

Global guidance documents

WHO defines emergency preparedness as "the knowledge and capacities and organizational systems developed by governments, response and recovery organizations, communities and individuals to effectively anticipate, respond to and recovery from the impact of likely, imminent, emerging, or current emergencies". Multisectoral preparedness coordination refers to deliberate collaboration between stakeholders from multiple and diverse sectors and disciplines working towards the shared goal of enhanced health emergency preparedness by leveraging knowledge, expertise, strengths, reach and resources. Successful multisectoral preparedness coordination is dependent on political, economic and social factors, and requires commitment from all stakeholders working together.

In October 2017, WHO Strategic Partnership for International Health Regulations (2–5) and Health Security (SPH) conducted a three-day meeting on "*Managing Future Global Public Health Risks by Strengthening Collaboration between Civilian and Military Health Services*" at Jakarta, Indonesia with representatives from over 50 states and 160 participants. The meeting aimed to:

a. Identify a shared vision for global health security based on close collaboration between public health sectors and relevant non-health sectors and relevant non-health sectors such as agriculture, transport, education, and security including military health services.

b. Support Member States in development of their National Action Plans for Health Security (NAPHS) and to accelerate the implementation of the International Health Regulations (IHR, 2005).

c. Formulate and agree on a call to action, recommendations, and next steps to guide the strengthening of collaboration between public health and military health services, and other relevant sectors.

The meeting included plenary discussion in addition to two tabletop exercises in which participants were prompted to think critically about the nature of their own national collaboration between civilian and military health services in the context of hypothetical health emergencies. The meeting concluded with following major statements:

1. There is value in collaboration between public health and the military in health emergencies. Strengthening collaboration would help in pooling resources, as well as in facilitating the use of specialist capabilities. This should be viewed in the wider context of intersectoral and multisectoral approaches to strengthening health systems. Government ministries (including transport, environment and agriculture), community leaders, civil society organizations, nongovernmental organizations (NGOs) and other partners all possess capabilities, some unique to each sector, which could be leveraged to promote health security.

2. Armed forces consist of distinct elements and the security sector is broader than the armed services. Therefore, understanding and finding ways of collaborating with the different parts of the security sector is key.

3. Collaboration should be embedded in planning, with the Ministry of Defense (MoD) and Ministry of Health (MoH) involved in establishing NAPHS in advance of any emergency and involved in joint exercises to test plans and improve procedures. Preparedness should also include raising awareness among policy-makers and other sectors of the importance of collaboration and coordination.

4. There are a variety of forms of cooperation — from case-by-case to formal structures and processes underpinned by national legislation; from single comprehensive whole government plans to coordination between sectors (each of which might have its own standard operating procedure [SOP]); and from those which focus on response to those which include preparedness. There is a need to identify best practices, while recognizing that national practices will vary according to circumstances.

5. There are a variety of forms of leadership, from top level political involvement to examples where either the MoH or MoD take the lead, to joint command structures. Again, there is a need to identify best practices while taking context into account.

6. Militaries should not be considered as a last resort, but instead as integral to emergency planning. Plans should include the mobilization of military assets at an early stage to help contain any outbreak (or in any other health crisis) rather than later when an outbreak might be approaching epidemic proportions.

7. International partnerships can be important in developing national preparedness plans. Partnerships might be with the United Nations (UN) system, including WHO, with other national governments, or with independent research and advisory bodies.

8. There are challenges to be overcome, including competition for scarce government resources, which might be a barrier to cooperation.

9. WHO has an important role to play in convening and coordinating, in advising on the development of national plans, and in monitoring and moderating.

The meeting participants recommended that countries should **develop a national framework for collaboration between civilian and military health and security sectors** with support of WHO.

In the year 2020, WHO published a Multisectoral Preparedness Coordination Framework, a document that provided State Parties, ministries and relevant sectors and stakeholders with an overview of the key elements for overarching, all-hazard, multisectoral coordination for emergency preparedness and health security, informed by best practices, country case studies and technical input form an expert group. Those elements form the basis of a multisectoral preparedness coordination framework that will aim to improve the coordination among relevant public stakeholders, particularly beyond the traditional health sectors, such as finance, foreign affairs, interior and defence ministries, national parliaments, non-state actors and the private sector, including travel, trade, transport and tourism.

The framework provided key elements for multisectoral preparedness coordination, which countries may consider when taking action within the context of the multisectoral preparedness coordination framework.

1. **High-level political commitment**
    a. **Country ownership**
        i. Seeking high-level political commitment and support
        ii. Embedding health emergency preparedness into overarching frameworks
        iii. Engaging the national parliament
    b. **Champions and leadership**
        i. Identifying champions in relevant sectors
        ii. Selecting leaders for the coordination process
2. **Formalizing multisectoral preparedness coordination**
    a. **Developing multisectoral coordination structures**
        i. Assessing existing multisectoral coordination structures
        ii. Constituting a steering committee
        iii. Initiating technical working groups
    b. **Stakeholder mapping and analysis**
        i. Mapping stakeholders
        ii. Analysing the needs and contributions of multisectoral stakeholders

c. **Joint needs assessment**

   i. Jointly collecting data on health risk and threats

   ii. Sharing of multisectoral information

   iii. Verifying parameters through the assessments

d. **Formalizing the multisectoral preparedness coordination**

   i. Benefits of formalization

   ii. Formalization at the highest administrative level possible

   iii. Formalized accountability frameworks for the steering committee and technical working groups

3. **Implementing multisectoral preparedness coordination**

a. **Transparency, trust and accountability**

   i. Building transparency and accountability at the onset

   ii. Establishing an understanding of the common goals and expectations

b. **Communication**

   i. Effective communication

   ii. Internal communication

   iii. External communication

c. **Health security preparedness funding**

   i. Allocating domestic funding for health security preparedness

   ii. Engaging the Ministry of Finance

   iii. Multisectoral preparedness coordination as an investment.

d. **Monitoring the multisectoral preparedness coordination**

   i. Good governance through measuring progress of the multisectoral preparedness coordination

   ii. Role of the International Health Regulations (IHR) Monitoring and Evaluation Framework (MEF)

This framework complements the international health regulation MEF and contributes to the strategic goal in the WHO Thirteenth General Programme of Work (GPW13) of 1 billion more people better protected from health emergencies, and supports the achievement of Sustainable Development Goal 3 – ensure healthy lives and promote well-being for all at all ages.

Further in 2021, WHO developed a "National civil–military health collaboration framework for strengthening health emergency preparedness: WHO guidance document". The aim of the guidance document was to provide the public health sector and military actors and services at the national level with guidance for establishing, advancing and maintaining collaboration and coordination, with the focus on country core capacities required to effectively prevent, detect, respond to, recover from and build back better after health emergencies. The framework identified lessons learnt from recent participation of military health services in responding to natural disasters, chemical, nuclear or radiological incidents, and disease outbreaks, including linkages to PHE operation centres and emergency medical teams (EMTs). Key elements identified by the framework for effective civil–military health collaboration for the development of national core capacity to prevent, detect, respond to and recover from health emergencies are highlighted including:

a) establishing a strategic collaboration plan for health emergency preparedness;

b) acknowledging differences between the public health sector and military health services;

c) identifying technical areas for collaboration based on the national core capacities for health emergency preparedness;

d) institutionalizing civil–military health collaboration; and

e) jointly building and training civil–military health emergency preparedness capacities.

Review of National Guidance Documents

Disaster Risk Reduction and Management Act, 2074

The DRRMA has mandated the establishment of a national council for disaster risk reduction and management to discharge disaster-related functions effectively under the chairmanship of the prime minister with representatives of all ministries.

A major function of the council is to lay down a national policy and programmes on disaster management, provide necessary directions to the executive committee and the authority in relation to policy and plans on disaster management, provide necessary policy guidance to the provincial and local levels on disaster management along with providing direction for the management of financial resources for disaster management and facilitate as well as evaluate the functions of disaster management.

Further, it has provision for the establishment of an executive committee with chair of MoHA and representatives of relevant stakeholders.

A major function of the committee is to prepare a national policy and plans on disaster management, approve integrated and sectoral polices, plans and programmes on DRR, response and recovery among many others. The Act has further defined its functions and duties (chapter 8, Mobilization and functions, duties and powers of security agencies) as:

- The security agencies shall get mobilized to discharge the functions of disaster management as and when necessary.
- The Government of Nepal may mobilize the Nepal Army for search, rescue and relief operations in the time of disaster.
- The security agencies shall have the right to enter any place and use the available resources of any person or organization for disaster response as per the order of the chief district officer.

This Act has given the Government of Nepal authority to mobilize military force during the time of disaster.

Public Health Service Act, 2075 (BS) and Public Health Service Regulation, 2078 (BS)

Chapter 7 Article 50 of the Public Health Service Act, 2075 (BS) has mandated the formation of a "National Public Health Committee" for addressing comprehensive social determinants of human health, making policy-wise recommendations on inclusion of the issues of public health into the policy and programmes of thematic scope with chair of Minister, Ministry of the Government of Nepal responsible for the matters relating to health and representatives of relevant ministries and authorities of the Government of Nepal as a member. The Act has shown the need for and importance of multi-stakeholders' involvement for PHEs.

Further, under Section 7 of Article 27, Management of Emergency Health Services, of chapter 8, Protection and Promotion of Public Health and Emergency Health Services and Prevention of Infection, Public Health Regulation 2077, has the provision to be able to deploy the health staff working in any health institution to another health institution or region as deem necessary while managing emergency health services or during a public health emergency. Thus, to further stressing the need for and importance of a unified and coordinated multisectoral response during PHEs, this section of the regulation has the provision to mobilize health-care workers of any institution to another health institution as deemed necessary.

Both these legal documents have acknowledged the importance of a multisectoral approach for the management of disasters and PHEs. However, further supporting official documents as policies, guidelines and/or operating procedures detailing roles and responsibilities of each involved stakeholder during the preparedness, response and recovery phase of disasters and PHEs along with defining mechanisms of coordination and collaboration and joint work plan for all would aid in implementing the multisectoral approach envisioned in these Acts.

The security agencies are leading the response to any disaster event. Without their efforts in search and rescue, disaster management would not have been possible from the health sector alone.

However, their role during PHEs seemed inadequately defined given their capacity and the recent PHEs such as Ebola and COVID-19 have highlighted the need of effective and efficient collaboration between the health sector and security authorities for management of PHEs.

National recommendations

Public health sectors and security agencies play a pivotal role in response to any disasters and PHEs. The DRRMA, 2074 has defined the role of the MoHA for leadership in multisectoral coordination in disaster management with the National Emergency Operation Center (NEOC) leading multisectoral coordination during response and the National Disaster Risk Reduction and Management Authority coordinating with the multisectoral approach for mitigative, preventive and preparedness activities. The multisectoral coordinated approach could be evidenced during disaster events with security agencies leading the search and rescue efforts and continued to get response from the health sector for treatment of casualties. However, during infectious disease outbreaks as observed in Nepal such as cholera, dengue and even during the COVID-19 pandemic, the roles and responsibilities of security agencies, the mechanism for coordination for outbreak investigation and case management seemed inadequately defined. In response to the need for effective management of the COVID-19 pandemic with multisectoral involvement and whole-of-society approach, a COVID-19 Crisis Management Center (CCMC) was established. This mechanism performed effectively and efficiently in coordination with all security agencies including public health in management of the COVID-19 pandemic in Nepal.

The COVID-19 Intra-action Review (IAR) was conducted on March 2022 to identify best practices, lessons, and gaps during COVID-19 response. It had provided an opportunity to review the national functional capacity of public health and emergency response system and to identify practical areas for immediate remediation or continued improvements of current response to the then ongoing COVID-19 pandemic. Of many recommendations from the IAR, multisectoral coordination and health in all approach should be further strengthened was one.

The International Health Regulation Joint External Evaluation (JEE) was conducted in November–December 2022. A total of 19 technical areas within 13 core capacities of IHR (2005) were assessed and priority action to improve each technical area was jointly developed by national and international experts. Of 19 technical areas, Health Emergency Management and Linking Public Health with Security Authorities are two. The priority actions defined in each of those technical areas are:

1. Health Emergency Management: Develop a range of Health Emergency Operations Center (HEOC)-specific plans including but not limited to an emergency operation plan; a civil–military-specific plan; a strategic humanitarian response plan; and a business continuity plan.

2. Linking Public Health with Security Authorities: Develop an integral, multisectoral capacity-building programme for all-hazards risk management, involving stakeholders from all relevant sectors.

These recommendations from national-level assessment and review had also sensitized the country to work on strengthening multisectoral collaboration and coordination with a special focus on collaboration between public health sectors and security authorities for PHEs.

Based upon these recommendations, the Government of Nepal, Ministry of Health and Population (MoHP) explored the possible ways to strengthen and formalize the collaboration between public health actors and security authorities for which MoHP requested WHO Country Office Nepal for technical support. Further, WHO Nepal coordinated with the WHO Regional Office for South-East Asia, Delhi, India and WHO headquarters, Geneva, Switzerland for their expertise and technical assistance.

Preparation for the workshop

Nepal conducted all four components of the International Health Regulation Monitoring and Evaluation Framework (MEF) in the year 2022. In March 2022, the MoHP submitted State Party Self-assessment Annual Reporting. In the same month, an IAR of the ongoing protracted COVID-19 pandemic was conducted. Although, the After-action Review is a component of IHR-MEF, due to protracted nature of the COVID-19 pandemic, IAR was considered as a component of MEF. In September 2022, a three-day Nepal Health Sector Simulation Exercise was conducted and later in November–December 2022. These assessments have helped to identify the status of the country's preparedness for disaster and PHEs. Further, these assessments have provided a set of recommendations that would further aid in strengthening country's health system for preparedness and response to any disaster and PHEs. Of many recommendations from these assessments, strengthening multisectoral coordination among relevant health and non-health actors was one of the areas for improvement.

COVID-19 Intra-action Review (IAR)

- Point of entry: Activation of the Public Health Service Act Committee (National Public Health Committee) to conduct multisectoral coordination.
- Public health and social measures: Multisectoral coordination to conduct risk assessments.
- Conclusion and the way forward:
    - Multisectoral coordination and "Health in all" approach should be further strengthened.
    - Continue and further enhance the coordination mechanism with development partners/NGOs, civil society and others.

International Health Regulation Joint External Evaluation

- Health emergency management:
    - Develop a **multisectoral,** multihazard health emergency management plan that includes an emergency risk and readiness assessment and preparedness and response plans at both the national and intermediate levels.
    - Develop a range of HEOC-specific plans including but not limited to an emergency operation plan; a **civil–military-specific plan;** a strategic humanitarian response plan; and a business continuity plan.

- Linking public health and security authorities
    - Develop an integrated, multisectoral capacity-building programme for all-hazards risk management, involving stakeholders from all relevant sectors.
    - Explore mechanisms for strengthening partnerships between key stakeholders during routine health care and emergencies, in order to ensure that essential health services are maintained.

- Nepal Health Sector Simulation Exercise
    - Considering adding additional cells/functions withing the HEOC. A potential area could be a dedicated liaison function between NEOC and HEOC, or at least routing whole of government issues such as Ministry of Foreign Affairs (MoFA) communications.

All these assessments and activities have recommended for strengthening multisectoral coordination for health security including coordination with non-health actors and security agencies. These recommendations have highlighted the importance of multisectoral coordination and have sensitized all relevant stakeholders to plan for and act upon it.

Consultation on advancing civil–military collaboration to strengthen health emergency preparedness, compendium of practices, June 2023

WHO is committed to strengthening multisectoral coordination for health emergency preparedness by engaging non-traditional health stakeholders as confirmed by the recent WHO resolution World Health Assembly (WHA) 74.7 (2021) on strengthening preparedness for health emergencies: implementation of the International Health Regulations (IHR, 2005). Civil–military health collaboration for health emergency preparedness in advance of a crisis is an area with potential to unlock substantial gains in national capacity to prevent, detect and respond to PHEs. To this end, WHO published the National Collaboration Framework (NCF) for Strengthening Health Emergency Preparedness, which aims to guide countries in linking public health and security agencies to strengthen and improve coordination among involved stakeholders. To further breach the need for and importance of this coordination at the country level, WHO called for the global consultation meeting on "*Advancing civil–military collaboration to strengthen health emergency preparedness, compendium of practices*", in which the Government of Nepal had participated through representatives from the MoHP and MoD.

The objectives of the meetings were to:

1. Demonstrate the linkages between WHO National Collaboration Framework for strengthening health emergency preparedness (NCF) to other relevant areas for preparedness, readiness and response, i.e. the IHR-MEF, emergency medical teams (EMTs), biosecurity and health security protection (BSP) and readiness and emergency operation centers (EOCs), etc.

2. Share research analysis, lessons and considerations, key elements, case studies, and good practices collected at the national and regional levels.

3. Gather participants' input on research analysis, case studies and good practices at the national, especially at the regional level.

4. Discuss how WHO and its partner can further support countries and build on the WHO NCF.

The meeting had fostered insightful conversations, engaging debates, and the sharing of best practices from various perspectives, which added immense value to the discussions on the advancement of NCF between civilians and the military for strengthening health security. Further, the meeting also aided in revitalizing and prioritizing the government's plan for strengthening coordination between public health and security agencies.

The HEOC, MoHP, which acts as a centre for coordination and information management among all relevant stakeholders for preparedness, readiness and response to disaster and PHEs, led the way for conceptualizing and planning for strengthening coordination between

public health actors and security agencies. With support of WHO Country Office Nepal, a national workshop for civil–military coordination and collaboration was envisioned.

Development of concept note

The HEOC, MoHP, reached out to WHO Nepal as a follow up to the consultation on advancing civil–military collaboration to strengthen health emergency preparedness, compendium of practices, June 2023 for the way forward in the case of Nepal. Implementing the "Health Security Mapping Tool" as a critical step to operationalize the "National Civil–Military Health Collaboration Framework for strengthening health emergency preparedness" in the context of Nepal was highlighted from the ministry with WHO ensuring the necessary support. A concept note was advised to be developed.

A joint team from the HEOC and WHO sat together and reviewed the documents available on coordination among public health and security agencies in Nepal. The major documents reviewed were the Disaster Risk Reduction and Management Act, 2074 (BS), Public Health Service Act, 2075 (BS) and Public Health Service Regulation, 2078. International guideline and recommendation such as WHO, Fifty-fourth WHA 2 April 2001 on Global Heath Security – epidemic alert and response and WHO strategic partnership for IHR (2005) and Health Security: managing future global public health risk by strengthening collaboration between civilian and military health services, 2017 were also considered. A National Civil–Military Health collaboration Framework for strengthening health emergency preparedness, 2021 was reviewed for recent knowledge and updates. From the national documents, recommendations from the JEE of the IHR core capacities of Nepal under health emergency management were considered. Thus, a concept note was developed and finalized within July 2023 with the plan of implementing the Health Security Mapping tool through a series of activities such as coordination meetings with relevant authorities, reviewing of tools, and conducting a national-level workshop.

Table 1.1. Timeline of activities leading to the collaborative workshop

2022	•**International Health Regulation Monitoring and Evalution Framework. SPAR / IAR / JEE / SimEx**
11–12 June 2023	•Participation of the Ministry of Health and Population and Ministry of Defense Nepal at Consultation on "**Advancing civil–military collaboration to strengthen Health Emergency Preparedness, Compendium of practice: Geneva, Switzerland**"
4 July 2023	•Conceptualization of the Workshop for Civil–Military Coordination and Collaboration – d**evelopment of the concept note**
1 August 2023	•**Multisectoral (MoHA, MoD, MoALD, Nepal Army, Nepal Police and APF) Coordination Meeting** as a preparation for civil–military coordination and collaboration
8 August 2023	•Coordination with three security agencies fo**r appointment of focal persons** in each agencies to support cross-sectoral coordination-related activities
9 August 2023	•**Orientation on Civil–Military Coordination** to relevant stakeholders by technical experts from WHO headquarters
24 August 2023	•Coordination with security agencies for feedback on the **"Cross-Sectoral Health Security Mapping Tool (CMAP)"**
8 September 2023	•Coordination with WHO headquarters for **revision on the CMAP** tool as per feedback received
19 September 2023	•**Completion of CMAP tool** and processed for analysis
30 September 2023	•**Coordination with all four stakholders** for preparation of the workshop
7 October 2023	•**Final preparatory meeting**
8–9 October 2023	•Workshop proper – **"National Workshop on Collaboration between Public Health, Nepal Army, Nepal Police and Armed Police Force to strengthen health emergencies preparedness"**

Multisectoral coordination meetings

Following the development of the concept note, a meeting was conducted with the relevant stakeholders (Department of Health Services, Department of Food Technology and Quality Control, Ministry of Agriculture and Livestock Development, Nepal Army, Nepal Police, Nepal Armed Police Force) at the MoHP. A preparatory meeting with the involvement of the public health sector and security agencies was called on 1 August 2023 to share the idea of the civil–military coordination and collaboration and understand their views. Action points of the meeting highlighted the need for the orientation on the civil–military global, regional practices and the tools used for the process of coordination and collaboration. Further, all the organizations were advised to identify the contact point for their organization in matter of civil–military coordination moving forward and provide their details to the MoHP.

Orientation on Cross-sectoral Health Security Mapping (CMAP) Tool

On 9 August 2023, amidst a meeting at the MoHP, the Civil–Military Health Security Mapping tool was demonstrated along with sharing of the practices at the global and regional levels to public health and security stakeholders. The decision was made in the meeting to review the tool by all the stakeholders and share with the HEOC if there are any changes, suggestions, or corrections.

Coordination with security agencies for feedback on CMAP Tool

The orientation meeting, held on 9 August 2023, served as a pivotal event to introduce and discuss the upcoming tool implementation. The meeting aimed to familiarize participants with the tool's purpose, functionalities, and anticipated impact. Following the orientation meeting, the tool was distributed among security forces, encouraging each participant to conduct an in-depth individual review. This approach was adopted to solicit valuable insights and recommendations before the tool's final implementation.

To facilitate a smooth review process, each security force was assigned a technical focal person from WHO Nepal. These designated individuals played a crucial role in providing support, clarifications, and technical assistance during the assessment of the tool. The Nepal Police, APF-Nepal, Nepal Army, and other relevant public health stakeholders actively engaged in an extensive review of the tool. Notably, the tool's reach extended beyond a hospital within the security forces; it was disseminated across all departments within security agencies to ensure comprehensive feedback.

In addition to the security forces, the tool's comprehensive scope within the public health domain involved various departments under the MoHP and other relevant ministries. This broad engagement ensured that the tool underwent a thorough evaluation, addressing both security and public health perspectives.

Table 1.2. Public health tool reviewed by various departments in coordination with the Ministry of Health and Population

S.No.	Public health dashboard	Reviewed by
1	Legislation and financing	MoHP Policy, Planning and Monitoring Division (PPMD), Quality Standard and Regulation Division (QSRD)
2	IHR coordination and NFP	Epidemiology and Disease Control Division (EDCD)
3	Zoonotic events and human–animal interface	Section chief, zoonotic and other communicable diseases, EDCD, National Public Health Laboratory (NPHL), One Health Section, Department of Livestock Services (DLS), Central Veterinary Laboratory (CVL)
4	Food safety	Director-General, Department of Food Technology and Quality Control (DFTQC); Section chief, Disease Surveillance and Research section, EDCD
5	Laboratory	Director, NPHL Director, CVL
6	Surveillance	Section chief, Disease Surveillance and Research section, EDCD
7	Human resources	MoHP
8	Health emergency framework	HEOC
9	Health service provision	Director, EDCD
10	Risk communication	Director, National Health Education, Information and Communication Center (NHEICC)
11	Point of entry	Section chief, Educational Organizations Management System (EOMS), EDCD
12	Chemical, biological, radiological and nuclear (CBRN) events	Nepal Army focal point for CBRN, Medical Physicist – Tribhuvan University Teaching Hospital (TUTH), Representative from the Ministry of Agriculture and Livestock, Nepal Academy of Science and Technology (NAST), hospitals

Coordination with WHO headquarters for revision on the CMAP tool as per feedback received

Upon the conclusion of the tool review, the designated focal technical persons for each security agency and public health department took on the responsibility of collecting and consolidating the feedback received from their respective entities. This phase involved a meticulous analysis of the comments and suggestions provided by the participants during the review process.

The aggregated feedback was then subjected to thorough discussion within the technical unit of WHO-WHE Nepal. This internal deliberation aimed to extract valuable insights, identify common themes, and prioritize the necessary changes that would enhance the tool's effectiveness and alignment with the stakeholders' needs of the country. Following this internal review, the pertinent feedback and identified modifications were communicated to the WHO headquarters for further consideration and implementation. The collaborative effort between the field-level technical unit and the central WHO headquarters ensured scientific refining of the tool.

Upon receipt of the revised tool from the WHO headquarters team, the updated version was disseminated to the relevant stakeholders for their confirmation and acceptance. This crucial step allowed the end-users, including security forces and public health entities, to validate the incorporated changes and ensure that the tool met their specific requirements and expectations. This collaborative and feedback-driven approach not only ensured the tool's technical robustness but also gave a sense of ownership and acceptance among the key stakeholders.

Completion of the CMAP tool and the process for analysis

After the revision process was completed, the ultimate version of the tool titled "Cross-Sectoral Health Security Mapping (CMAP) Tool" was disseminated by the MoHP to all pertinent stakeholders. The stakeholders were tasked with populating the tool with real-time data and scenarios to ensure its applicability and effectiveness in practical situations.

The comprehensive process of filling out the CMAP tool by the stakeholders spanned 10 days. This period allowed for a thorough and detailed input of data, reflecting the dynamic nature of health security scenarios, and ensuring a comprehensive representation within the tool.

Upon the completion of data input, the populated CMAP tool underwent a meticulous analysis by the WHO focal technical team. This team critically reviewed the analysed data, discussing its relevance, accuracy, and overall quality. After confirming the results internally, the findings were subjected to validation from the four key stakeholders involved in the initial review process.

Following the stakeholders' confirmation, the analysed and validated data were transmitted to WHO headquarters for further in-depth analysis and collation.

Coordination with all four stakeholders for preparation to workshop

After analysing the tool and with the intention of sharing the findings, the groundwork for a workshop in Nepal was initiated. The workshop, designed to bring together high-ranking officials from various security forces, necessitated careful preparation and scheduling to allow ample time for organization and invitations.

Given the workshop's broad scope, the guest list included esteemed individuals such as the Minister of Health and Secretaries from key ministries, including the MoHP, MoFA, MoD, MoHA, and Ministry of Education.

To enrich the workshop discussions, external experts from WHO headquarters, in collaboration with WHO Nepal and the MoHP, extended invitations to experts from the WHO Regional Office for South-East Asia (SEARO).

To facilitate effective presentations during the workshop, all security agencies and public health stakeholders received support in preparing their tool presentations. Each stakeholder identified focal persons who would be responsible for presenting the tool, ensuring a well-coordinated and informative session during the workshop. This collaborative effort aimed to maximize the impact of the workshop by engaging key officials and experts in a comprehensive discussion based on the analysed findings of the tool.

Workshop Proper

The two-day workshop was conducted on 7– 8 October 2023 at Kathmandu, Nepal. The detailed agenda of the program is presented in Annex 1.

Opening ceremony

The Opening ceremony of the workshop was chaired by **Dr Dipendra Raman Singh,** Additional Secretary of MoHP, commenced in guardianship of Honorable **Mr Mohan Bahadur Basnet**, Minister, MoHP and in the gracious presence of **Mr Kiran Raj Sharma,** Secretary, MoD; **Dr Rewati Raman Poudel,** Secretary, Ministry of Agriculture and Livestock Development; **Dr Tanka Prasad Barakoti,** Additional Secretary, MoHP; **Dr Sangeeta Kaushal Mishra,** Director-General, Department of Health Services (DoHS); **Mr Thaneshor Gautam**, Joint Secretary, MoHA; and **Dr Rajesh S. Pandav**, WHO Representative to Nepal.

Director General of Medical Services, Army Medical Corp, Nepal Police Hospitals, directors and representatives of various divisions and centres of MoHP and DoHS, Department of Food Technology and Quality Control, CVL, National Disaster Risk Reduction and Management Authority, Hub hospitals of Kathmandu attended the programme. Further, secretaries and representatives of provincial ministries looking after health and internal affairs and law, directors, and representatives of health directorate from all provinces and focal persons from Provincial Health Emergency Operation Centers (PHEOC) were also present in the programme. The list of participants of the programme is shown in Annex-2.

The Opening session began with the National Anthem of the country **"सयै थुङ्गा फुलाका हामी एउटै माला नेपाली".**

Dr Prakash Budathoky delivered the welcome remarks in the opening ceremony. He highlighted the frequent events of floods and landslides occurring in the country along with disease outbreaks – dengue, cholera, measles, influenza, etc. affecting the health and lives of people as well as economy of the country. During such events saving lives and preventing disabilities and death becomes a priority of the country with the health workers and security personnel working tirelessly day and night. Although health and non-health partners are involved during any PHEs and disasters, Dr Prakash stressed that, these emergencies often expose the need for a coordinated multisectoral and holistic approach for preparedness and response.

The welcome remarks were followed by opening remarks from the distinguished guest present in the dais. **Dr Ludy Suryantoro**, Unit Head of Multisectoral Engagement for Health Security from WHO headquarters delivered his opening remarks on overview of collaboration between public health and security agencies for PHEs.

Dr Ludy highlighted a pressing concern that affects us all: the need for advancing multisectoral collaboration for health security, including civil and military capacities, to prevent, detect, and respond to emerging health threats. In an interconnected world where diseases can spread rapidly and have far-reaching consequences, it is imperative that we work together across sectors to safeguard the health and well-being of our global community.

Health security is a complex and multifaceted challenge that requires a comprehensive and collaborative approach. It goes beyond the mere absence of disease and encompasses the capacity to prevent, detect, and respond to PHEs. To effectively address these challenges, we must foster partnerships and cooperation among various sectors, including civil and military organizations. Civil and military capacities each bring unique strengths and resources to the table. Civil organizations, such as public health agencies, health-care systems and NGOs, play a vital role in disease surveillance, response planning, and community engagement.

They possess the expertise and experience necessary to detect and monitor outbreaks, educate the public, and provide essential health-care services. On the other hand, military organizations have distinct capabilities that can be harnessed to bolster health security. They possess logistical expertise, rapid response capabilities, and extensive resources that can be deployed swiftly to support emergency response efforts. Their experience in crisis management and command structures can help facilitate coordination and streamline operations in times of crisis.

To advance multisectoral collaboration, we must break down silos and promote information sharing, coordination, and cooperation between civil and military entities. This requires building trust, fostering communication channels, and establishing clear lines of authority and responsibility. Regular joint exercises, trainings, and simulations can help enhance interoperability and ensure that all stakeholders are well-prepared to respond to health emergencies.

Civil and military organizations possess unique capabilities, expertise, and resources that, when combined, can create a formidable force in tackling health security challenges. Civil institutions, such as public health agencies, hospitals, and humanitarian organizations,

bring invaluable experience in disease surveillance, epidemiology, health-care delivery, and community engagement. On the other hand, the military's logistical capabilities, rapid response mechanisms, and command structures are pivotal in providing the necessary support during crisis situations. Collaboration between civil and military sectors for health security preparedness encompasses a wide range of activities. This includes joint planning and coordination, sharing of information and intelligence, capacity-building, resource mobilization, and response operations.

By working together, we can establish early warning systems, improve surveillance networks, enhance laboratory capabilities, and develop effective strategies for prevention, detection, and response to emerging public health threats.

It is crucial to acknowledge that collaboration between civil and military sectors must be guided by principles of transparency, accountability, and respect for human rights.

Civil–military partnerships should be founded on mutual trust, open communication, and a shared commitment to safeguarding the health and well-being of our populations. In conclusion, the collaboration between civil and military sectors for health security preparedness is not an option but a necessity in today's complex world.

In conclusion, advancing multisectoral collaboration for health security, including civil and military capacities, is essential in our ever-changing and interconnected world. Let us commit ourselves to building robust partnerships, fostering cooperation, and investing in the necessary cross-sectoral resources. Together, we can create a healthier, safer, and more secure world for all.

Following the opening remarks from Dr Ludy, a formal opening of the programme was commenced by Honourable **Mohan Bahadur Basnet**, Minister, MoHP by lightening the Panas.

Dr Rajesh Sambhajirao Pandav, WHO Representative Nepal focused on significance for coordination and collaboration between public health and security agencies for PHEs. The role of security agencies in responding to natural and environmental disasters has been long established. Multisectoral engagement is essential for effective health security, particularly in addressing health emergencies. Collaboration between civil and security entities can play a crucial role in enhancing preparedness, response, and recovery. A comprehensive approach involving sectors such as health, defence, agriculture, transportation, and communication is necessary for addressing complex health emergencies. The collaboration enables the sharing of resources, expertise, and capabilities, benefiting both civil and security agencies. Globally the benefits and significance of collaboration with security agencies in responding to infectious disease outbreaks was realized and experienced during the response of Ebola virus disease outbreak in West Africa 2014–2016 and the Zika virus disease outbreak in 2016. In Nepal the importance of security agencies in infectious disease outbreak was observed, experienced, and realized during COVID-19 response. It would have been impossible without their support and collaboration for such effective and efficient response to the pandemic. The need of collaboration was realized early during the pandemic for medical air evacuation of 175 Nepalese citizens from Wuhan to Nepal with joints efforts from the HEOC, EDCD, Nepal

Army, Nepal Police Hospital, Waste Management Team, Ambulance Service and Civil Aviation Authority, which was delivered successfully. The collaboration grew further and stronger as effect of the pandemic stretched the health system. The COVID-19 pandemic has reiterated the long-realized importance of this cross-sectoral collaboration with further significant scale and complexity. The pandemic has reinforced the need of collaboration between agencies working for public health sectors and security agencies while preparing and responding to public health threats and risks.

This collaboration facilitates capacity-building, joint planning, and information sharing, enhancing overall preparedness and response capabilities. During such collaborations, the respect for the roles and expertise of each sector is fundamental in ensuring effective collaboration. Clear legal and policy frameworks are essential to govern civil–security agency collaboration, ensuring transparency and accountability.

This programme also marks the beginning of the journey to address and implement the priority actions recommended by the IHR-JEE. I would like to congratulate the leadership of Honourable Minister, MoHP and his guidance, under whom, the MoHP has fast tracked in implementation of priority actions recommended by the IHR-JEE completed few months ago.

This collaboration facilitates capacity-building, joint planning, and information sharing, enhancing overall preparedness and response capabilities. During such collaborations, the respect for the roles and expertise of each sector is fundamental in ensuring effective collaboration. Clear legal and policy frameworks are essential to govern civil–security agency collaboration, ensuring transparency and accountability.

To note, multisectoral engagement should not be limited to emergencies but also focus on long-term development, strengthening health systems and community resilience. By promoting multisectoral engagement and collaboration between civil and security agencies, we can enhance our collective ability to respond effectively to health emergencies, protect populations, and ensure health security for all.

Mr Thaneshor Gautam, Joint Secretary, Ministry of Home Affairs focused on need to enhance the effectiveness of health emergency preparedness and strengthen the collaboration and coordination with security agencies Nepal Army, Nepal Police and Nepal Armed Police Force. He stressed the need to focus on preparedness and mitigation and this initiation on how the security agencies should collaborate with health stakeholders during any health emergencies will be strengthened through this workshop. Through this workshop the MoHP, health partners, donor agencies, international and security agencies can discuss a concrete workplan which will further strengthen our coordination and furthermore bring a coordinated and effective response in the near future.

Dr Sangeeta Kaushal Mishra, Director General, Department of Health Services began her remarks with various calamities faced by Nepal in the past 7 years, from the devastating 2015 earthquake to the most recent COVID-19 pandemic. She pointed out cross sectoral collaboration had worked together during the 2015 earthquake, the pandemic and during most

disasters or PHEs but however, lack coordination among different sectors, line ministries and stakeholders during the non-disaster state. All organizations have their own emergency framework, every ministry have their own preparedness plan. However, we lack an integrated plan through which all stakeholders can coordinate with each other for an efficient and swift response. We have various stakeholders present in this workshop who have their own strengths and weaknesses; incorporating the strengths and weaknesses we can create an integrated plan which will support in reducing the mortality during any disaster or PHEs.

Dr Rewati Raman Poudel, Secretary, Ministry of Agriculture and Livestock Development, highlighted the objective of the workshop to strengthen emergency preparedness is a crucial topic for the country Nepal. He emphasized on the impact of zoonotic diseases on human health with the need to include zoonotic disease in the emergency action plan. Moving forward, the involvement of three-tier government in these workplans is crucial. Further, he informed, Our country is progressing with the plan to eliminate human deaths from dog-mediated rabies by 2030 and called for collaborative efforts from all sectors to achieve this goal. He called for an implementable action plan which is relatable and consistent with the country's needs through this workshop.

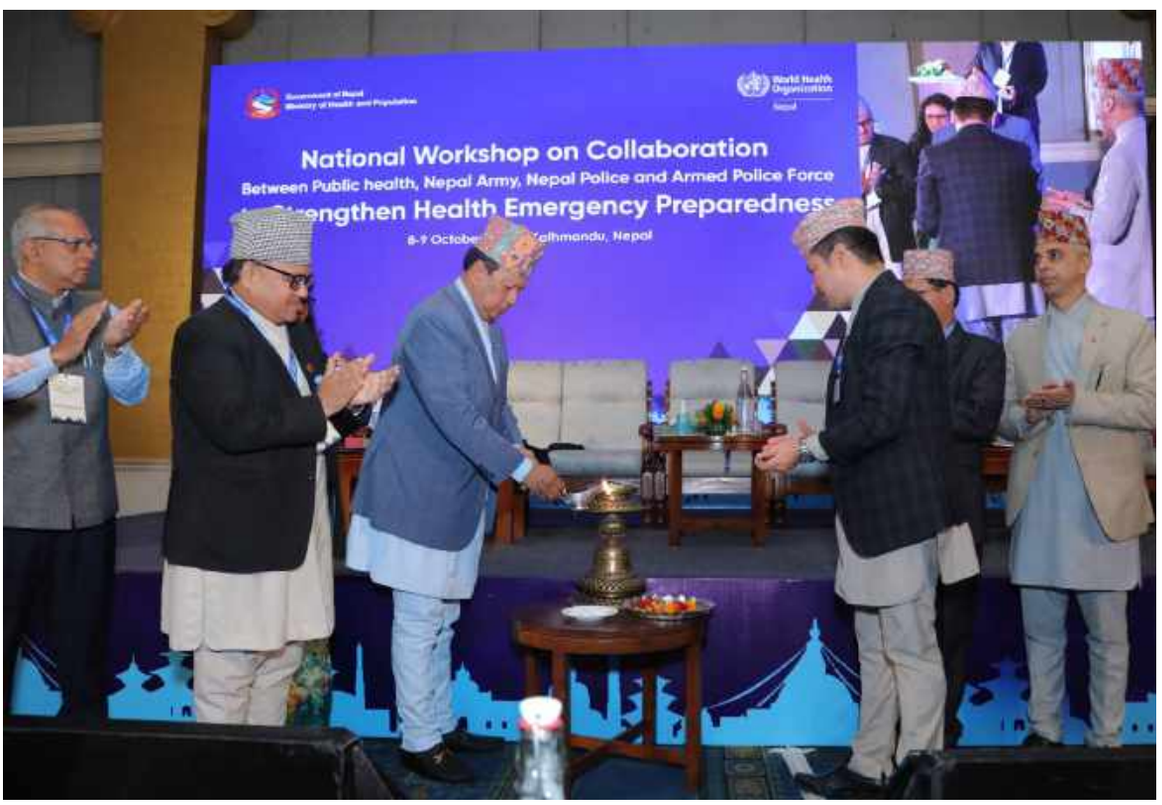
Mr Kiran Raj Sharma, Secretary, Ministry of Defense congratulated the MoHP and relevant ministries on conducting the crucial National Workshop on Collaboration between public health, Nepal Army, Nepal Police and Armed Police Force to strengthen health emergency preparedness. He emphasized a whole nation approach is required for disaster management as sole involvement of government sectors only cannot manage the disaster. He informed that the security council committee has included cross-cutting issues in the national security policies and to strengthen the national security, health security has also been incorporated in the policies. Health security is sensitive, it impacts globally thus there is need to be attentive and alert of any public health concern. Health security not only threatens the country, but it is a global threat and affects the entire population; thus, if there is an all-inclusive action plan the security council committee as well as the MoD will provide additional support as required. If there are any cross-cutting issues that requires backing from the MoD, and if there are any additional suggestions through this workshop, he assures it will be considered seriously and proactively incorporate them into their action plan.

Honourable Minister **Mr Mohan Bahadur Basnet,** Ministry of Health and Population highlighted the importance of this cross sectoral initiative. Nepal is known as a high-risk disaster country. Every year different parts of the country face different forms of hazards. That is why it is important to understand our role in preparedness to these disasters. There are various existing mechanisms for disaster preparedness and response in the country: at leadership of Prime Minister, at home ministry, at the MoHP, a network of hub and satellite hospitals, and within Nepal Army, Nepal Police and Armed Police Force as well. Further, at the request of the Government of Nepal, our development partners also have their own system and plans in place for preparedness and response. Despite all these preparedness and existing systems – because of geographical difficulties – at the time of disaster, we face challenges in timely access and response to the events. It is thus important to have a detailed study and

prepare plans and implement preparedness activities accordingly. In spite of the challenges, all stakeholders including security agencies, health workforce and development partners, all have pushed themselves in harm's way, continuously working and responding to disasters. He is hopeful that the workshop will be a milestone for management of future emergencies through cross sectoral collaboration among health sector and security agencies.

Dr Dipendra Raman Singh, chair of the programme, Additional Secretary, Ministry of Health and Population expressed his sincere gratitude to everyone who has worked tirelessly to bring together the two-day programme. Nepal is a country that faces a multitude of challenges, primarily due to its susceptibility to natural disasters and recurring infectious disease outbreaks. The importance of civil–health security collaboration in health emergencies cannot be underestimated. One vivid example of this coordinated effort was during the devastating earthquake of 2015, where a seamless collaboration between national and international security forces, along with health-care workers, was instrumental in saving lives.

Similarly, during the COVID-19 pandemic, we witnessed the importance of a multisectoral coordination centre involving health, non-health, and security forces. This centre was pivotal in managing and controlling the spread of the virus, demonstrating the need for effective collaboration between health and non-health actors, specifically with our security forces, in preparing for and responding to health emergencies. That is why security forces should be an integral partner in our emergency planning. Early mobilization of each other's assets can help contain outbreaks and crises, preventing them from reaching epidemic proportions. The two-day workshop aims to institutionalize existing collaborations and formulate joint activities, an immediate workplan, and a roadmap for the future.



Technical sessions

The technical session began with **Dr Subash Neupane,** National Professional Officer, Project and Partnerships Management, WHO Nepal reiterating that the workshop is being conducted with adherence to the WHO Code of Conduct to prevent harassment, including sexual harassment. He facilitated the technical session as well.

The technical session had presentations on the regional context of civil–military collaboration followed by a technical guidance document on global perspective and ongoing global developments to strengthen collaboration between civilian and military health services for preparedness and response to health emergencies.

WHO SEARO perspectives, strategy and projects related to cross-sectoral collaboration

Dr Sandip Sindhe, Technical Officer, CPI, WHO Regional Office for South-East Asia made a presentation on regional perspective, strategy and projects related to cross-sectoral collaboration with a focus on health security preparedness. The presentation underlined the importance of International Health Regulations (2005) being an internationally agreed instrument for global public health security, which provides an overarching legal framework that defines rights and obligations of the countries in handling public health events and emergencies that have the potential to cross borders.

The presentation also informed participants about the Working Group on IHR (WGIHR) amending on IHR based on issues, challenges and strengths captured by country and regional IARs on the COVID-19 pandemic, summarized at the global level along with the Inter governmental Negotiation Body (INB) working on issues related to restrictions in travel and trade, vaccine nationalism, and in equity in access and distribution. Further, 10 proposals to build a safer world together including strengthening the global architecture for health emergency preparedness, response and resilience (HEPR), and the regional strategic roadmap on health security and health system resilience for emergencies 2023–2027 was also informed.

The presentation also deliberated on IHR-MEF and its objectives to build transparency, mutual accountability, trust building, appreciation of public health benefits, dialogue, and sustainability. IHR-MEF has four components. Throughout the pandemic, information from these four components have informed the understanding of critical preparedness gaps at the national level.

Mandatory
State Party Annual Self-assessment Reporting
Every year using the standard SPAR tool
Voluntary
Joint External Evaluation
Every five years using the JEE tool
Simulation exercise
Regular basis
After-action review / intra-action review
Following / during each response

In addition to the four components of IHR-MEF, the presentation also informed participants on the Strategic Toolkit for Assessing Risks (STAR) workshop, which assists in identifying risk matrix

of each country in consultation with all relevant stakeholders and International Health Regulations – Performance of Veterinary Services National Bridging workshops, which allow the sectors to strengthen their collaboration at the human–animal interface while improving their compliance to international standards and regulations. The session concluded by summarizing how all these assessments and workshops aid in development of a National Action Plan for Health Security (NAPHS).

Linking public health and security authorities

Another session of the presentation deliberated on linking public health with security authorities. Linking public health and security authorities is one technical area under "Respond" among 19 technical areas of IHR-JEE. This technical area aims to assess how public health and security authorities (e.g. law enforcement, border control, customs) are involved during a suspect or confirmed biological events. The IHR-JEE conducted in Nepal during November–December 2022 had scored 20% (lowest score). This is significantly lower than the South-East Asia regional average of 60%. The session also reminded all on priority actions agreed during IHR-JEE to strengthen the collaboration, which are:

1. Make necessary adjustments to existing legal provisions to ensure the creation of a multihazard, multisectoral plan of action that includes CBRN events and defines specific roles and responsibilities of key stakeholders.
2. Enhance resource planning to create a budget plan for upgrading technical competencies of key government institutions and entities across sectors, including the National DRR and Management Authority, the EOCs, the Department of Hydrology and Metrology, Search and Rescue, diagnostic facilities and other relevant stakeholders in disaster and PHE preparedness.
3. Develop an integrated, multisectoral capacity-building programme for all-hazards risk management, involving stakeholders from all relevant sectors.

The presentation concluded by exploring possible prospective areas for collaboration between civilian and military health services.

Advancing cross-sectoral collaboration to strengthen health emergeny preparedness

Dr Ludy Suryantoro, Unit Head, Mulitsectoral Engagement for Health Security, WHO headquarters, presented a global presective on advancing cross-sectoral collaboration to strengthen health emergeny preparedness. The session focused on alignment between the National Civil and Military Collaborative Framework for strengthening health emergency preparedness (NCF) and IHR-MEF and identify priority areas.

Multisectoral Engagement for Health Security Preparedness

Strengtheing multisectoral capacities for preparedness and response to public health threats is vital. The session highlighted how WHO uses its technical and convening mandate to support countries in prioritization and development of national policies, which support multisectoral engagement and to put national preparedness priorities on the agenda of national regional and global leaders to foster collaboration and an investment case to support progress towards national preparedness goals.

WHO Guidance on National Civil–Military Health Collaboration Framework for Strengthening Health Emergency Preparedness

The natioal guidance document was developed to provide public health stakeholders and military actors and services with guidance to establish, advance, and maintain cross-sectoral collaboration and coordination for reinforcing essential public health functions for health emergency preparedness at the national and subnational levels, underpinned by a whole-of-society approach. The document has suggested enabling factors for civil–military health collaboration for emergency preparedness:

1. establishing a strategic collaboration for health emergency preparedness;
2. acknowledging differences between public health and military health services;
3. identifying technical areas for health emergency preparedness collaboration;
4. institutionalizing civil–military health collaboration from preparedness; and
5. jointly building capacity and training for health emergency preparedness.

The session concluded with areas for deliberation on the workshop:

1. To formalize civil–military coordination for health emergency preparedness at the national level
2. To map cross-sectoral resources that are available in the event of future health emergencies
3. To identify key priority actions/technical core capacities considered by cross-sectroal stakeholders as priority
4. To identify details of joint activities related to recent health emergencies and which should be incorporated into future planning
5. To identify key gaps and needs and most importantly a coordination plaform for collaboration between the two sectors
6. To implement joint capacity-building activities that strengthen functions for health emergency preparedness and contibute to the NAPHS.

Cross-sectoral Health Security Mapping (CMAP) Tool

Dr Ludy in a subsequent session presented the Cross-sectoral Health Security Mapping (CMAP) Tool. The mapping tool was developed to identify cross-sectoral action contributing to IHR (2005) implementation – from both the public health and military sectors. In addition, the tool supports countries in identifying areas where preparedness capacities are lacking, and where cross-sectoral collaboration would be beneficial.

The tool complements the NCF guidance document in strengthening collaboration between public health and security authorities for strengthening health emergency preparedness.

Lessons learnt from the past collaboration and the COVID-19 pandemic

Following the technical session on the regional and global perspective on collaborative efforts among civilian and security authorities, a presentation was made from each relevant stakeholder, i.e. public health, Nepal Army, Nepal Police and Armed Police Force Nepal, on the lessons learnt and relevant past cross-sectoral collaboration for health emergency preparedness in Nepal. The session was facilitated by **Dr Allison Gocotano**, Team Leader, Health Emergencies Programme, WHO Nepal.

Nepal Army

Dr Nabin Bhakta Shakya from the Director General's office of Medical Corps, Nepal Army began the presenation with a quote by Mr Henry Ford: "Coming togther is a beginning, keeping together is progress and working together is success." The presentation highlighted a list of recent major events with significant contribution from Nepal Army, namely earthquake, COVID-19, flooding and landslide.

The session began with background information upon which the civil–military relation has evolved as highlighted by ferment civil–military relations as one of the key factors during the Humanitarian Assistance and Disaster Relief operation. In Nepal, the Natural Calamity Relief Act, 1982 marks as a key event in the evolution of civil–military collaboration. Over the years, Nepal Army has played a key role in response to disasters including the Koshi Flood (2008), Jajarkot Cholera Outbreak (2009), Avalanche and Blizzards in the western region of the country (2014) and Earthquake (2015).

To strengthen the disaster preparedness and collaboration with civilian stakeholders, Nepal Army has been conducting integrated exercises in collaboration with civilian stakeholders on different scenarios since 2075 (BS) named as "Exercise Hatemalo". Further, a Disaster Response Exercise and Exchange (DREE) is also being organized since 2011 (AD) with civil–military participation.

Nepal Police

Dr Abhinash Dhoj Pradhan, Nepal Poilce, began the presentation highlighting the contribution of Nepal Police during COVID-10 pandemic response with over 40 733 police personnel deployed, 360 functional checkposts and 369 health desk established. Nepal Police is also an active member of the COVID-19 Crisis Management Center (CCMC) and further collaborate with three tiers of government and administrative levels for disaster preparedness and response.

The support provided by WHO during the pandemic through technical assistance, development of guideline, various capacity-building activities and also the establishment of an oxygen plant at Nepal Police Hospital as well as support provided by the United Nations Office for Project Service (UNOPS) was well acknowledged.

Nepal Police was engaged in community-based initiatives such as setting up of quarantine facilities, distribution of personal protective equipment and dealing with any socially untoward activities, collaboration with health workers in contact tracing and identification/ isolation of the COVID-19 cases. Further, Nepal Police had a significant role in dissemination of accurate information and raise awareness about COVID-19 preventive measures and played a crucial role in counteracting misinformation.

Previously, Nepal police had campaigned to strenthgn the collaboration as “Community Police Parternship – 2018”.

Armed Police Force, Nepal

Dr Roshan Parajuli from Armed Police Force Nepal began the presentation highlighting the past relevant cross-sectoral collaboration for health emergency preparedness in Nepal mainly:

1. 27 Feburary 2023: Memorandum of Understanding (MoU) with the MoHP (supported by GIZ) with the objective of Health Care Waste Management.
2. 14 March 2023: Establishment of the Severe Acute Respiratory Illness (SARI) Treatment Center in the premises of Nepal Armed Police Force (APF) hospital with collaborative efforts from the MoHP and APF supported by WHO Nepal.
3. 25 April 2015: Coordinated effort in response to Gorkha/Sindhupalchok Earthquake.
4. 22 March 2020: Collaborative effort with three security agencies to form a COVID-19 Unified Hospital network across the country under the leadership of the MoHP.
5. Deep water diving and fire-fighter training: In collaboration with provincial and local-level governments.

During COVID-19 pandemic response, Nepal APF hospital had performed over 40 000 RT-PCR tests for COVID-19, treated 5054 COVID-19 cases, among which 3685 were civilians. Further, over 1272 APF personnel were directly involved in treatment of COVID-19 cases.

Public Health

Dr Prakash Budathoky, Spokesperson, MoHP presented the public health perspective on past relevant cross-sectoral collaboration for health emergency preparedness in Nepal. Key collaborative efforts from pubilc health sectors for heatlh emergency preparedness in recent years were:

- Sensitization on health structures for coordination and communication of information during health emergencies:
    - o Involvement of the PHEOCs, Provincial Emergency Operation Centers (PEOCs) and District Emergency Operation Centers (DEOCs) from respective provinces in the presence of HEOC and NEOC to provide a broad overview of the management of disasters and PHEs in Nepal.
- Cross-sectoral coordination workshop for information communication during health emergencies.
    - o Building up to the previous sensitization activity.
    - o There were involvement of PHEOCs, hospitals, health offices, other health entities in the provinces, PEOCs, DEOCs, respective ministries in the provinces, HEOC and NEOC. A major objective was to deliberate on the informatin flow channel during any disaster or PHEs which the participants developed through discussions.
- In the year 2022, Nepal had successfully completed all four components of IHR-MEF.
    - o State Party Self-assessemnt Annual Reporting Tool
    - o JEE of IHR capacities in Nepal
    - o Nepal Health Sector Simulation Exercise
    - o COVID-19 Intra-action Review (IAR)
- Stratigic Toolkit for Assessing Risks Workshop
- COVID-19 Crisis Management Center (CCMC)

Following the presentations on lessons learnt from past collaboration and the COVID-19 pandemic from Nepal Army, Nepal Police, Armed Police Force and Public Health, Dr Allison Gocotano summarized the session highlightening the existing continued collaboration and ample experience of collaboration between public health and security agencies especially during natural disasters either in seasonal events such as monsoon or sudden acute events like Nepal Earthquake 2015. Further, extensive collaboration between involved stakeholders was also observed during infectious disease outbreaks such as the recent COVID-19 pandemic. Dr Allison further briefed on the collaboration between relevant stakeholders observed during the recent technological hazard of Pokhara airplane crash and invited Mr Khim Bahadur Khadka, Director General, Health Directorate, Gandaki Province to share his experience of response especially cross-sectoral coordination and collaboration observed during the response to the crash.

Recent cross sectoral Collaboration – Experience sharing

Mr Khim Bahadur Khadka, Director, Health Service Directorate, Gandaki Province shared an experience on coordinated response to recent airplane crash and lessons learnt from the response. On 15 January 2023, Nepal suffered one of the disastrous airplane crashes in Pokhara, which resulted in 72 fatalities (68 passengers, including 15 foreigners and four crew members). Between 1962 and 2023, Nepal had seen over 72 air crashes resulting in 935 fatalities. For a coordinated response, an emergency joint cross-sectoral stakeholders meeting was conducted with the presence of public health stakeholders and representatives of three security agencies.

During the response, all three security agencies were involved in search and rescue of the fatalities from the disaster site. Further, Nepal Army was supported in dead body transportation from the disaster site to hospital (Pokhara) and further from Pokhara to Kathmandu, whereas Nepal Police supported in handover of dead bodies to the relatives and management of vehicles. Vehicle acess to the disaster site was done by traffic police and the Armed Police Force (APF) provided security on the disaster site and crowd control in the hospital (Pokhara).

For different stakeholders of Public health, the Ministry of Social Development and Health and Health Directorate had activated the PHEOC and rapid response teams for coordiantion with district administration offices, hub and satellite hospital network along with coordination with the federal government for necessary support to conduct post mortem of the dead persons. The Pokhara Academy of Health Sciences led as hub hospital of the affected site for management of dead bodies along with coordianation with nearby satellite hostpials and hub hospital in Kathmandu.

The lessons learnt from the response was summarized as:

1. Information sharing of the disaster focal person of each sector for effective and efficient coordination.
2. Need for a functional infomration desk during disaster events.
3. Need for cross-sectoral sharing of reports.
4. Cross-sectoral institutional preparedness and readiness to deal with such disasters.
5. Need for capacity enhancement including joint drill.
6. Formulation and execution of a Provincial Disaster Preparedness and Response Plan.

Results of Cross-sectoral health Security Mapping (CMAP) Tool

This session summarized the findings of the CMAP tool for each stakeholder.

Nepal Army

Dr Nabin Bhakta Shakya presented the findings CMAP tool of Nepal Army. The CMAP tool identified mobile preventive/public health units, logistics and military engineering as areas in which Nepal Army could support in strengthening health security preparedness capacities, whereas military capacities in areas such as laboratories, veterinary services and CBRN capacities needed more attention for collaboration to contribute to overall health security. With regard to IHR core capacities, the tool identified risk communication as an IHR capcity with meaningful contribution from Nepal Army, whereas capacities such as national legislation, policy and financing, food safety, CBRN capacities and points of entry were identified as that would benefit from enhanced contribution from public health and military collaboration. With regard to enabling elements, legislative context for collaboration, implementation of joint actvities in line with health priorities and levaraging competitive advantage of cross-sectoral collaboration requried much attention, whereas high-level commitment, building trust and developing understanding of each other's organizational culture and capabilities and funding for joing emergency efforts were identified as requirements for further development.

In summary, a low level of cross-sectoral collaboration was observed by the tool between the military and public health for preparedness and Nepal Army identified the following areas as priority activities to enhance the collaboration.

1. Joint planning for infectious diseases and mass casualty management
2. Laboratories strengthening in biosafety
3. Chemical, biological and radionuclear capabilities
4. Logistics and supply chain management for PHEs.

(Findings of the tool – Dashboard Nepal Army is given in the Annex. 3)

Nepal Police

Dr Abhinash Dhoj Pradhan presented the findings of CMAP tool of Nepal Police. The CMAP tool identified fixed medical facilities, mobile preventive/public health units, and logistics as areas in which Nepal Police could support in strengthening health security preparedness capacities, whereas Nepal Police capacities on areas such mobile police treatment and evacuation units, evacuation teams/units, CBRN capabilities and MoU agreements between the MoHA and other ministries needed more attention for collaboration to contribute to overall health security. With regard to IHR core capacities, the tool identified zoonotic events and laboratory as IHR capcities with meaningful contribution from Nepal Police, whereas capacities such as national legislation, policy and financing, points of entry, chemical events, and radionuclear emergencies were identified as capacities that would benefit from enhanced contribution from public health and military collaboration. With regard

to enabling elements, legislative context for collaboration, implementation of joint actvities in line with health priorities and levaraging competitive advantage of cross-sectoral collaboration requried much attention, whereas multisectoral, whole-of-government appraoch, taking stock of capacities in both sectors and formalizing collaboration on health security preparedness were identified as requirements for further development.

In summary, a medium level of cross-sectoral collaboration was observed by the tool between the police and public health for preparedness and Nepal Police identified the following areas as priority activities to enhance the collaboration.

1. Need to focus on legislative aspect, policy-making and implementation
2. Develop a dedicated team for health emergency situation (including teams for evacuation/CBRN handling capabilities)
3. Strengthen joint activities with all stakeholders for health emergency preparedness

(Findings of the tool – Dashboard Nepal Police is given in the Annex. 4)

Armed Police Force Nepal

Dr. Ashish Thapa, Deputy Superintendent of Police presented the findings of CMAP tool of APF, Nepal. The CMAP tool identified fixed medical facilities, mobile preventive/ evacution units, human resources and logistics as areas that Armed Police Force, Nepal could support in strengthening health security preparedness capacities, whereas Armed Police Force, Nepal capacities on areas such veterinary services and CBRN capabilities needed more attention for collaboration to contribute to overall health security. With regard to IHR core capacities, the tool identified coordination and NFP communication, response, surveillance and risk communication as IHR capcities with meaningful contributions from Armed Police Force, Nepal, whereas capacities such as food safety, zoonotic events, CBRN and laboratory were identified as capacities that would benefit from enhanced contribution from public health and military collaboration. With regard to enabling elements, legislative context for collaboration, implementation of joint actvities in line with health priorities and levaraging competitive advantage of cross-sectoral collaboration requried much attention, whereas funding for joint emergency preparedness efforts and identifying specific technical areas for collaboration were identified as requirements for further development.

In summary, a low to medium level of cross-sectoral collaboration was observed by the tool between the Armed Police Force, Nepal and the public health for preparedness and Armed Police Force, Nepal identified the following areas as priority activities to enhance the collboration.

1. Formal endorsement of civil–security forces collaboration through legislation
2. Joint activities to prevent, detect, respond and recover from health emergencies
3. Combined simulation exercises and other forms of trainings

(Findings of the tool – Dashboard Armed Police Force Nepal is given in the Annex. 5)

Pubic Health

Dr Samir Kumar Adhikari, Ministry of Health and Population presented the findings of CMAP tool of public health sector. The CMAP tool identified health service provision and IHR coordination and NFP functions as areas in which public health leverages cross-sectoral collaboration with security stakeholders for preparedness capacities, whereas capacities on areas such as legislation financing, food safety, national health emergency framework, risk communication, point of entry and CBRN events and human resources were identified as requiring more attention to unlock the potential for cross-sectoral collaboration. With regard to IHR core capacities, the tool identified coordination and NFP communication the only capacity leveraged by the public health sector with cross-sectoral collaboration, whereas capacities such as legislation and financing, food safety, point of entry, chemical event, risk comunication and CBR events were identified as capacities that would benefit from enhanced cross-sectoral contribution. With regard to enabling elements to enhance the collaboration, legislative context for collaboration, high-level commitment, sharing information for increased understanding, formalizing collaboration on health emergency preparedness, devising collaboration framwork, implementation of joint actvities in line with health priorities, levaraging competitive advantage of cross-sectoral collaboration and funding for joint emergency preparedness efforts were identified as requirements for further development.

In summary, a low level of cross-sectoral collaboration between public health and secutiry stakeholders for preparedness was observed with least cross-sectoral collaboration with military was observed. The public health sector identified the following areas as priority activities to enhance the collboration.

1. Joint planning and monitoring
2. Capacity-building
3. Simulation exercises

(Findings of the tool – Dashboard Public health is given in the Annex. 6)

Following the dissemination of CMAP findings of each stakeholder, a question and answer sesion was commenced and was facilitated by Dr Ludy Suryantoro. Dr Ludy expressed gratitude to the focal persons from various security agencies for presenting their findings. He acknowledged the significance of their insights and set the stage for a discussion on various aspect of collaboration:

1. Legislation and collaboration: Dr Ludy requested the security agencies to provide their perspectives on the role of legislation. Dr Ashish Thapa highlighted the absence of legal documents binding security agencies and public health. He, however, noted instances of collaborative efforts. Dr Abhinash Dhoj Pradhan explained the complexities of collaboration due to diverse ministries overseeing security agencies. Dr Nabin Bhakta Shakya stressed the need for a proper legislation, suggesting a strong MoU between the MoHP and MoD.

2. Parliamentary support and public health perspective: Dr Ludy shared his experience of parliamentary support for MoU development, advocating for MoUs over lengthy parliamentary processes. He then turned to Dr Samir Kumar Adhikari who concurred with security agencies on the necessity of legislation. Dr Adhikari highlighted existing disaster-related Acts and regulations and supported the development of legislation focused on public health.

3. CBRN issues and support: Dr Ludy addressed concerns raised by security agencies regarding chemical, biological, radiological, and nuclear (CBRN) issues. Dr Nabin Bhakta Shakya acknowledged the Nepal Army's lack of CBRN capabilities but emphasized their key role. Dr Amit from Nepal APF outlined their accreditation process with the International Search and Rescue Advisory Group (INSARAG) and stressed the need for defined roles and proper training. Dr Abinash Dhoj Pradhan from Nepal Police admitted their primitive stage in CBRN preparedness. Dr Samir Kumar Adhikari from public health echoed the agencies' concerns and emphasized the country's reliance on security agencies for CBRN issues.

4. Workshop importance and preparedness: Dr Ludy highlighted the workshop's importance in raising awareness of capacities among security agencies and public health. He stressed the need for preparedness for all hazards, including CBRN, and queried if security agencies could support other agencies with workforce.

5. Security agencies' support: Dr Nabin Bhakta Shakya suggested training, exercise, and capacity enhancement as contributions from the Nepal Army. Dr Ashish Thapa proposed joint training and workshops based on their COVID response experience. Dr Abinash Dhoj Pradhan recommended training and simulated exercises, emphasizing scenario setting and joint actions. Dr Samir Kumar Adhikari emphasized knowledge capacitance, exposure, and skills through collaboration with experienced countries.

Breakout sessions

Following the technical session and a presentation on lessons learnt for past collaboration and CMAP tool's findings, a breakout session was commenced. All participants were divided in four heterogeneous groups with representatives of all three security agencies and public health in each group for session 1 and 2 and for sessions 3, all participants were divided into three homogeneous groups with representatives of each security agencies in one group supported by members of public health stakeholders. Session 1 focused on identification of existing collaboration mechanism between public health and security agenices, whereas session 2 explored technical areas for cross-sectoral collaboration and session 3 was focused on defining the roadmap for joint cross-sectoral activities to strengthen health emergency preparedness for Nepal and requried enabling factors to formalize the collaboration.

Breakout session 1 – Identifying the existing collaboration mechanism

For this session, all participants were divided into four heterogeneous groups with representatives of all security agencies in each group supported by representatives of public health authorities. The members of each group are shown in the Annex. In this session, participants deliberated on various existing legal frameworks and mechanisms for cross-sectoral collaborations along with existing best practices, challenges and the way forward to further strengthen the collaboration.

With regard to the existing legal framwork, the Constitution of Nepal further supported by the Disaster Risk Reduction and Management Act, Infectious Disease Act, Public Health Service Act, Nepal Army Act, Nepal Police Act and Armed Police Force Act, among many others documents mandate coordinated efforts for preparedness and response to disaster and PHEs. Further, various existing mechanisms such as networks of EOCs across the three tiers of government, networks of HEOCs, leaderships of chief district officers through the District Administration Office and District Disaster Management Committee were identified as strengths to the existing cross-sectoral collaboration. Despite all these strengths, the group identified areas of some weaknesses mainly lack of definitive legal document for collaboration and mechanisms for cross-sectoral information sharing and data management among many others.

Further, the team deliberated on ongoing best practices through cross-sectoral collaboration, especially the concept of hub and satellite hospital networks and various joint capacity-building activities on disaster and PHEs preparedness and resposne readiness. To further strengthen the cross-sectoral collaboration, during this group discussion, a way forward was also discussed.

Among many identified activities, development of a single compreshensive and approriate legislation and interoperable reporting system and data management were highlighted.

(A detailed finding of breakout session 1 is given in the Annex 7.)

Breakout session 2 – Identifying technical areas for collaboration

While session 1 focused on identifying the existing collaborative mechnisms, its enabling factors and identifying best practices, the discussion during session 2 was centred on IHR technical areas and joint activities between public health and security agencies. A heterogeneous group same as for session 1 was continued for this session. A summary of session 2 is given below:

S.No.	Technical area	Joint activity
1	**National legislation, policy, and financing**	1. Amendment of the existing legal frameworks 2. Formation of legal frameworks
2	**Coordination and IHR national focal point**	1. Amendments of the existing IHR multisectoral corodination commetee
3	**Surveillance**	2. Data and information management
4	**Health service provision**	1. Joint collaboration for essential drugs, equipment and human resources 2. Critical care: Capacity assessement and identification 3. Joint orientation/sensitization on the developed guidelines 4. Common EMR/ EMS
5	**Health emergency management**	1. Joint capacity-building activities
6	**Human resources**	1. Joint monitoring 2. Harmonized Health Workforce Surge Plan 3. Common database on different specialists including hospitals 4. All-hazard contingency plan for a predesignated referral system with segregated roles and reponsibilities 5. Joint capacity-building: drills and emergency-related trainings
7	**Point of entry**	Joint planning and monitoring
8	**Risk communication and community engagement**	Colaborative development of RCCE materials and dessimination through designated spokespersons
9	**Laboratories**	1. Joint capacity-building 2. Regular meeting 3. Laboratory accreditation 4. Risk communication

10	**Chemical, biological, radiological and nuclear events**	Joint planning
11	**Food safety**	Collaboration for sensitization and tasking

(A detailed finding of breakout session 1 is given in the Annex 8.)

Before proceeding to the third break out group, Dr. Allison Gocotano, presented on the various types of technical documents to be used during discussions to achieve a common understanding of their purpose. These documents include:

1. Policy is a generic statement that provides direction. For example: "all suspect H1N1 patients must receive Oseltamivir."
2. Protocol is a technical input to support policy statement. For example:
    i. Case definition for suspected cases
    ii. Dosage and use of oseltamivir
    iii. Storage and handling of oseltamivir
3. Guideline – administrative inputs, step by step. For example:
    i. How to procure oseltamivir.
    ii. How to transfer and distribute oseltamivir.
4. Procedures – rules that are specific to the implementing office. For example:
    i. Establishment of and "express lane" in the emergency room; also includes the focal person in the facility to receive calls and query of the public within their catchment populations.
    ii Separate entry and exit for suspected cases to minimize infection spread and protect patient privacy.

Breakout session 3

Roadmap for joint cross-sectoral activities to strengthen health emergency preparedness, and

How to formalize the cross-sectoral collaboration to improve coordination for health emergency pareparendness in Nepal

While sessions 1 and 2 were conducted among hetergeneous groups with representatives of all four stakeholders (public health, Nepal Army, Nepal Police and Armed Police Force Nepal) in each group, for session 3, a homogeneous group was formed. All members of each security agenices were placed in one group with memebers of relevant public health sectors.

Thus, three groups were formed: Group 1 – Nepal Army and public health; Group 2 – Nepal Police and public health; and Group 3 – Armed Police Force and public health. Session 3 involved intensive discussion on joint activities requried in each IHR teachnical areas to improve collaboration and coordination to strengthen preparedness for health emergencies and its requried entities for formalizing these collaboration.

The following template for documenting the agreed action points from the group discussion was prepared and shared with each group:

S.No.	Technical area	Joint activities	Activity details	Required enabling factor	Remarks (details on enabling factor)	Timeline	Frequency

This template was based upon the guidance and recommendations provided by the WHO guidance document for national civil–military health collaboration framework for strengthening health emergency preparedness. A drop-down option was provided in the following areas as:

1. **Technical area**

a. Policy, legal and normative instrument to implement IHR
b. IHR coordination and IHR-NFP
c. Financing
d. Laboratory
e. Surveillance
f. Human resources
g. Health emergency management
h. Health service provision
i. Infection prevention and control
j. Risk communication and community engagement
k. Point of entry and border health
l. Zoonotic diseases
m. Food safety
n. Chemical events
o. Radiation emergencies

2. **Joint activities**

a. Joint training
b. Joint planning and monitoring

c. Joint simulation exercise
d. STAR
e. After-action review
f. Resource mapping of NAPHS
g. National bridging workshop
h. Others

3. **Requried enabling factor**

a. Legal framework
b. Policies
c. MoUs
d. SOP
e. High-level commitment
f. Others
g. Not required/existing is sufficient

4. **Timeline**

a. With in 1 year
b. Within 2 year
c. Within 5 years
d. Not applicable

5. **Frequency**

a. Ad hoc
b. One time
c. One time with periodic review
d. Monthly
e. Quarterly
f. Biannual
g. Annual
h. Biennial

Nepal Army

Technical areas for collaboration between Nepal Army and public health
Health emergency management
Laboratory
Chemical events
Radiation emergencies
Infection prevention and control
Health service provision
Policy, legal and normative instrument to implement IHR

Of the 15 technical areas, Nepal Army identified seven technical areas for joint activity with public health. The group identified joint planning and monitoring as the most common reqiured joint activities followed by joint trainings, national briding workshops and joint simulation exercise as other joint activites to improve collaboration between Nepal Army and public health for strengthening health emergency preparedness. While there are various existing legal frameworks mandating Army's role for disaster management, the group agreed that high-level commitment is requried for implementation of various planned joint activities along with formulation of a new legal framework especially for CBRN-related activities, SOPs and MoUs involving relevant stakeholders.

(A detailed finding of the group discussion is given in the Annex.9)

Nepal Police

Of the 15 technical areas, Nepal Police identified six technical areas for joint activity with public health. The group identified Joint training as the most common reqiured activities followed by joint planning and monitoring, and joint simulation exercise as other joint activites to improve collaboration between Nepal Police and public health for strengthening health emergency preparedness. The group also recognized high-level commitment with formation of mulitsectoral committees along with defined terms of reference of each involved stakeholders and MoU as requried enabling factors for improving collaboration.

Technical areas for collaboration between Nepal Police and public health
Health emergency management
Policy, legal and normative instrument to implement IHR
Laboratory
Surveillance
Risk communication and community engagement
Health service provision

(A detailed finding of the group discussion is given in the Annex 10)

Armed Police Force Nepal

Technical areas for collaboration between Armed Police Force Nepal and public health
Health emergency management
Policy, legal and normative instrument to implement IHR
Laboratory
Point of entry and border health
Human resources
Chemical events
Radiation emergencies

Of the 15 technical areas, Armed Police Force Nepal identified seven technical areas for joint activity with public health. The group identified joint planning and monitoring as the most common reqiured activities followed by joint simulation exercise, joint training and after-action reviews as other joint activites to improve collaboration between Nepal Police Force and public health for strengthening health emergency preparedness. The group discussion further documented high-level commitment along with development of legal frameworks and SOPs as requried enabling factors for improving collaboration.

(A detailed finding of the group discussion is given in the Annex. 11)

Closing Ceremony

The closing ceremony was commenced in presence of **Dr Biskash Devkota,** additional secretary as chief guest. **Mr. Gyan Prasad Dhakal,** secretary, MoSD, Sudurpaschim province in his remarks thanked MoHP and WHO for organizing the program, which provided a platform for cross-sectoral stakeholders to plan better for response to health emergencies. Based on the learnings and experience of past disasters and the COVID-19 pandemic, and considering the existing legal frameworks and resources across the sectors, he hoped the workshop has enabled us to prepare better and plan for joint activities for coordinated multi-sectoral response to health emergencies.' He emphasize the need of acting on the recommendations provided by the workshop.

Dr. Ludy reiterated the importance of multisectoral collaboration for health emergencies and stated that the workshop is only the first step in establishing multisectoral collaboration for health security. He thanked and congratulated everyone involved for successful conduction of the workshop and shared his opinion of the workshop being the best he had participated in and reiterated for continuous collaboration. Dr. Rajesh commended the leadership of MoHP for the successful initiative of cross-sectoral collaboration. He highlighted the importance of multisectoral engagement including public health and security agencies particularly while addressing health emergencies with clear understanding of roles and expectations while respecting mandates of each sectors.

Dr. Bikash Devkota, additional secretary, MoHP, chief guest of the closing ceremony expressed his pride for successful implementation of first ever cross sectoral collaboration workshop.

He informed everyone following the opening ceremony of the workshop, the honorable minister of MoHP held the coordination meetings with authorities of Nepal Army, Nepal Police and Armed Police Force Nepal to further strengthen and institutionalize the collaboration with security agencies.

Issues and challenges

Over the course of various group discussions and panel discussions, the following issues and challenges were identified:

1. Inadequate implementation of the existing Acts and other legal frameworks.
2. Existing multiple documents (framework) and mechanisms creating confusion among stakeholders regarding their definite roles and responsibilites.
3. Lack of intersectoral/cross-sectoral information and data management and dissemination.
4. Lack of mechanisms for cross-/intersectoral resource management.
5. Cross-sectoral collaboration and coordination can be seen practised only during large-scale disasters and pandemics such as 2015 earthquake, COVID-19 pandemic. However, the collaboration and coordination is not continued and practised during the preparedness and response readiness phase.
6. Lack of One Health approach at the local level led to reduced cross-sectoral collaboration opportunties.
7. Frequent transfer and turnover of the trained staffs in each agency has led to the loss of institutional memory and unavailability of proper documentation and mechanisms, despite certain collaboration practised in the past, the gains are not sustained.
8. Lack or weak insurance and/or intentives coverage for frontline responders (regardless of agencies).
9. Finally, political unstability and increased political influence in the government system.

The way forward

Based upon the summary and findings of each group discussion, the way forward to improve collaboration and coordination between public health and security agencies for strengthening health emergency preparedness are:

1. Review of all existing legal frameworks – formulate one single comprehensive mechanism between public health and security agencies defining roles and responsibility of each stakeholder.
2. Formation of national committees/task force with multisectoral representaion to improve collaboration between public health and security agencies.
3. Regular joint planning and monitoring of various activities on each technical areas.
4. Development of a mechanism for cross-sectoral logistics resource sharing.
5. Development of a mechanism for cross-sectoral information and data sharing.
6. Conduction of joint capacity-building activities.

To implement these activities for collaboration, the following factors are required:

1. High-level commitment
2. Development and/or revision of existing Acts, policies and plans.
3. Development of cross-sectoral SOPs and MoUs
4. Capacity enhancement
5. Financial commitment

Annexes

Annex 1. Agenda of the Workshop

National Workshop on Collaboration

Between Public Health, Nepal Army, Nepal Police and Armed Police Force, Nepal

to Strengthen Health Emergency Preparedness

8 – 9 October 2023

Hotel Yak & Yeti, Kathmandu, Nepal

Workshop objectives:

- To outline the health security organizations and resources of the public health, military, armed police and police and to identify synergies and areas for potential cross-sectoral collaboration.
- To map cross-sectoral capacities and capabilities corresponding to the IHR core capacities relevant to strengthening health emergency preparedness.
- To provide countries with an overview and in preparation of the cross-sectoral national workshops on health emergency preparedness.

Day 1: Sunday, 8 October 2023

Master of Ceremony: MoHP

Time	Topic	Facilitator
0930 hrs onwards	**Registration**	**WHO Nepal / Event Management**
1000 - 1045	**Opening ceremony** **Introduction of Guests (Dias)** 1. Chairperson, Mr. Dipendra Raman Singh, Secretary, MoHP 2. Guardian: Hon'ble Minister Mr. Mohan BDr Basnet, MoHP 3. Special Guest: a. Mr. Kiran Raj Sharma, Secretary, MoD b. Dr Rewati Raman Poudel, Secretary, MoALD 4. Dr Tanka Prasad Barakoti, Additional Secretary, MoHP 5. Dr Sangeeta Kaushal Mishra, Director General, DoHS 6. Mr. Thaneshwor Gautam, Joint Secretary, MoHA 7. WHO Representative, Nepal **Introduction of Guest** 8. Dr Arun Sharma, Director General of Medical Services, Army Medical Core, Nepal Army 9. Dr Asha Singh, Chief, Nepal Police Hospital 10. Dr Rupak Maharjan, Chief, Armed Police Force Hospital 11. Division Chiefs of MoHP, DoHS 12. Rep., Ministry of Education, Science and Technology 13. Secretary of Provincial Ministries, Directors of Health Directorate from all provinces. 14. Dr Ludy Suyantoro, WHO HQ 15. Dr Sandip Shinde, WHO SEARO 16. DG or Representative, DFTQC 17. DG or Rep., CVL 18. Rep., NAST 19. Rep. NEOC 20. Rep. NDRRMA 21. Rep. PHEOC 22. Directors of Hub and satellite hospitals. **National Anthem** **Welcome Remarks and objective of the program** 1. Dr Prakash Budhathoky, Spokesperson, MoHP Overview of the Collaboration between public health and security agencies for public health emergency preparedness - Dr Ludy Suyantoro, Unit Head, Multisectoral Engagement for Health Security, WHO Headquarters Formal Opening of the Program – Lightening of Panas **Opening Remarks** 1. Dr Rajesh S Pandav, WR Nepal 2. Mr Thaneshwor Gautam, Joint Secretary, MoHA 3. Dr Sangeeta Kaushal Mishra, Director General, DoHS 4. Dr Rewati Raman Poudel, Secretary, MoALD 5. Mr. Kiran Raj Sharma, Secretary, Ministry of Defence 6. Guardian: Hon'ble Minister Mr. Mohan BDr Basnet, MoHP 7. Chairperson, Dr Dipendra Raman Singh, Additional Secretary, MoHP	Mr. Ravi Kanta Mishra, Information Officer, MoHP
1045-1115	**Group Photo and Tea Break**	

Technical Session		
1115-1140	**Setting the scene:** • Presentation by WHO, SEARO (15 minutes) Dr Sandip Shinde - WHO SEARO perspectives, strategy and projects related to cross-sectoral collaboration. - WHO SEARO on perspective on health security preparedness. • Presentation by WHO, HQ (10 minutes) Dr Ludy Suryantoro, WHO HQ - Advancing Cross-sectoral collaboration to Strengthen Health Emergency Preparedness	WHO Nepal
1140 -1155	**Cross-Sectoral Mapping Tool (CMAP) (15 minutes)** Ludy Suryantoro, WHO HQ - Introductory presentation on Cross sectoral Health Security Mapping (CMAP) Tool	WHO Nepal
1155-1235	**Lessons learnt from the COVID-19 pandemic for future cross-sectoral coordination in Nepal *(presentation from each participating sector)*** - Dr Prakash Budhathoky, Spokesperson/Chief HEOC, Ministry of Health and Population (7 minutes) - Dr Nabin Bhakta Shakya, Nepal Army (7 minutes) - Dr Abinash Dhoj Pradhan, Nepal Police (7 minutes) - Dr Roshan Parajuli, Armed Police Force Nepal (7 minutes) The session will highlight the following topics: - Reflecting on relevant legislation, agreements and mandates and correlated capacities and capabilities - Identifying existing cross-sectoral collaboration and coordination mechanisms in Nepal - Facilitated Discussion by Dr Allison Gocotano, WHO Nepal (10 minutes)	WHO Nepal
1235 - 1330	**Lunch**	
1330 - 1410	**Results from CMAP** - ***Security Agencies Dashboard (10 minutes each - 30 minutes)*** Dr Nabin Bhakta Shakya, Nepal Army Dr Abinash Dhoj Joshi, Nepal Police Dr Ashish Thapa, Armed Police Force Nepal - ***Public Health Dashboard (10 minutes)*** Dr Samir Kumar Adhikari, Sr. Health Administrator, MoHP - ***Facilitated discussion Ludy Suryantoro, WHO HQ (10 Minutes)***	WHO Nepal
1410-1420	**Group Division and Arrangement**	
1420 - 1505	**Breakout session 1: Identifying existing collaboration mechanism (4 Groups – Heterogeneous Groups) :(45 Minutes)** • Briefing on the breakout session by Ludy Suryantoro, WHO HQ - Participants divided into 4 breakout groups to identify existing key areas of cross-sectoral collaboration and coordination in Nepal	

1505 - 1535	**Presentation of discussion from breakout session 1: (30 minutes)** • Welcome back groups by Ludy Suryantoro, WHO HQ - Each breakout group has 5 minutes to present their findings, followed by an open discussion of each group's findings	
1535 - 1550	**Coffee Break**	
1550 - 1635	**Breakout session 2: Technical areas for collaboration: (45 minutes)** • Briefing on the breakout session by Ludy Suryantoro, WHO HQ - Groups discuss gaps and needs, and which technical areas that would benefit from the sectors working together. - Groups discuss the 15 IHR core capacities and any other technical areas specifically relevant in the context of Nepal.	
1655 - 1700	**Presentation of discussion from breakout session 2: (25 minutes)** • Welcome back groups by Ludy Suryantoro, WHO HQ - Each breakout group has 5 minutes to present their findings, followed by an open discussion of each group's findings.	
1700	**Summary - Day one** • Dr Prakash Budhathoky, MoHP	MoHP

Day 2: Monday, 9 October 2023

Master of Ceremony: MoHP

Time	Topic	Facilitator
1000 - 1030	**Opening of Day 2** • Welcome – Dr Prakash Budathoky, MoHP • Recap day 1 – Dr Nabin Bhakta Shakya, Nepal Army • Objectives for workshop day 2 session, • Ludy Suryantoro, WHO, HQ	Dr Sandip Shinde, WHO SEARO
1030 - 1230	**Breakout session 3: 3 Groups - Homogenous** Opening Remarks by Ludy Suryantoro, WHO HQ 1. Roadmap for joint cross-sector activities to strengthen health emergency preparedness for Nepal - Key cross-sectoral priority areas for the future - List of prioritized cross-sectoral activities - Target timelines, roles, and responsibilities 2. How to formalize the cross-sectoral collaboration to improve coordination for health emergency preparedness in Nepal	
1230 - 1245	**Tea- Coffee break**	
1245 - 1330	**Presentation of discussion from breakout session 3:** Welcome back groups by Ludy Suryantoro, WHO HQ - Each breakout group to present their findings, followed by an open discussion of each group's findings.	
1245 - 1345	**Lunch break**	
1345 - 1445	**Presentation of discussion from breakout session 3:** Continue Welcome back groups by Ludy Suryantoro, WHO HQ - Each breakout group to present their findings, followed by an open discussion of each group's findings.	
1445 - 1515	**Coffee break**	
1515 - 1600	The way forward and next steps for cross-sectoral collaboration: - Summary of priority actions - Roadmap - Formalization of collaboration Closing remarks by Ludy Suryantoro, WHO, HQ	MoHP
1600 - 1630	**Closing Ceremony MoHP** - Summary of Workshop – Dr Sandip Shinde, WHO SEARO - Participants Reflection on Workshop a. Dr Lee Budathoki, Nepal Army b. Mr. Gyan Prasad Dhakal, Secretary, MoSD, SuPa - Dr Rajesh S Pandav, WR nepal - Dr Bikash Devkota, Additional Secretary, MoHP - Dr Prakash Budhathoky, MoHP	MoHP
END OF WORKSHOP		

Annex 2. List of Participants

Representatives From Public Health Sector

S.No.	Name	Organization	Designation
1	Mr. Mohan Bahadur Basnet	MoHP	Minister
2	Dr Rewati Raman Poudel	MoALD	Secretary
3	Mr. Kiran Raj Sharma	MOD	Secretary
4	Mr. Thaneshwor Gautam	MoHA	Joint Secretary
5	Dr Dipendra Raman Singh	MoHP	Add. Secretary
6	Dr Tanka Prasad Barakoti	MoHP	Add. Secretary
7	Dr Bikash Devkota	MoHP	Add. Secretary
8	Dr Sangeeta Kaushal Mishra	DoHS	Director General
9	Dr Prakash Budathoki	HEOC, MoHP	Chief
10	Dr Manisha Rawal	STIDH	Director
11	Dr Anuj Bhattachan	NHTC	Director
12	Dr Samir Kumar Adhikari	MoHP	Sr.Health Administrator
13	Ms. Anjana Pokhrel	MoHP	Section officer
14	Mr. Ramesh	MoHP	
15	Mr. Arjun Bahadur Bist	MoHP	
16	Mr. Netya Narayan Shrestha	MoHP	
17	Mr. Sher Bdr B.K	MoHP	Sec Officer
18	Mr. Eak Dev Khanal	MoHP	Joint Secretary
19	Mr. Aashis lamichhane	MoHP	
20	Mr. Sanovai Khadka	MoHP	
21	Mr. Khem Chapagai	MoHP	
22	Mr. Amrit Gurung	HEOC, MoHP	Emergency Medical Dispatcher
23	Mr. Ashish Katel	HEOC, MoHP	Emergency Medical Dispatcher
24	Mr. Binod Parajuli	HEOC, MoHP	Emergency Medical Dispatcher
25	Ms. Suju Shrestha	HEOC, MoHP	Staff Nurse
26	Ms. Bimala Rana	HEOC, MoHP	Staff Nurse
27	Ms. Rita Thapa	HEOC, MoHP	Staff Nurse
28	Prof. Dr Dinesh Kumar Lamsal	Civil Service Hospital	HUB Coordinator
29	Dr Niranjan Panta	Curative Service Division	Medical Officer
30	Dr Ram Chandra Sapkota	CVL	SUO
31	Dr Sharmila Chapagain	CVL	Director
32	Mr. Kiran Pd Rai	DFTQC	SDRO
33	Dr Sanu K shrestha	Dhulikhel Hospital	HOD DHER
34	Mr. Tara Bdr Kunwar	NDRRMA	Section officer
35	Mr. Bharat Raj Pandey	NDRRMA	Officer
36	Ms. Sheela Shrestha	NHEICC	Sr. HEA
37	Mr. Ram Singh Chudamani	NHEICC	

38	Mr. Chetannidi Wagle	NHTC	Sec Chief
39	Mr. Pramod Niraula	NHTC	Computer Operator
40	Mr. Hari B.Shrestha	NHTC	O.A
41	Mr. Dhirab Karki	NHTC	
42	Mr. Nabin Pradhan	NHTC	
43	Dr Sunita Tiwari	NPHL	C. Patho
44	Dr Rony Maharjhan	PAHS	MDGP
45	Mr. Ravi Kanta Mishra	MoHP	Sr. PHO
46	Dr Dinesh Kafle	TUTH	Executive Director
47	Mr. Deepak Dulal		MOHP

Representatives From Security Authorities

S.No.	Name	Organization	Designation
1	DSP Amit Singh	APF	
2	Dr Roshan Parajuli	APF Hospital	MDGP
3	Dr Ashish Thapa	APF Hospital	DSP
4	Surendra Prasad Bhattarai	APF Hospital	Inspector
5	Sujan Katuwal	APF Nepal	Inspector
6	Maj. General Arun Sharma	Nepal Army	Director General, Army medical Core
7	Kumar Roka	Army Hospital	HOD Medicine
8	Lilahari Adhikari	Army HQ	
9	Rajendra Karki	Army HQ	
10	Col. Dr Nabin Bhakta Sharma	Army Medical Corps	Medical Planner
11	DSP Ram Kumar Yadav	DMO	Nepal Police
12	DSP Dabal Bam	DMO	Nepal Police
13	Kapli Dev Joshi	MOHA	Inspector, Nepal Police
14	Dr Lee Bhudathoki	Nepal Army	Associate Proof, COL
15	Captain Rojan Katwal	Nepal Army	Captain
16	Dambar B.R	Nepal Police	SSP
17	Dr Abinash D.Joshi	Nepal Police	DSP
18	Dr Asha Singh	Nepal Police Hospital	Chief

Representatives From Provincial Government

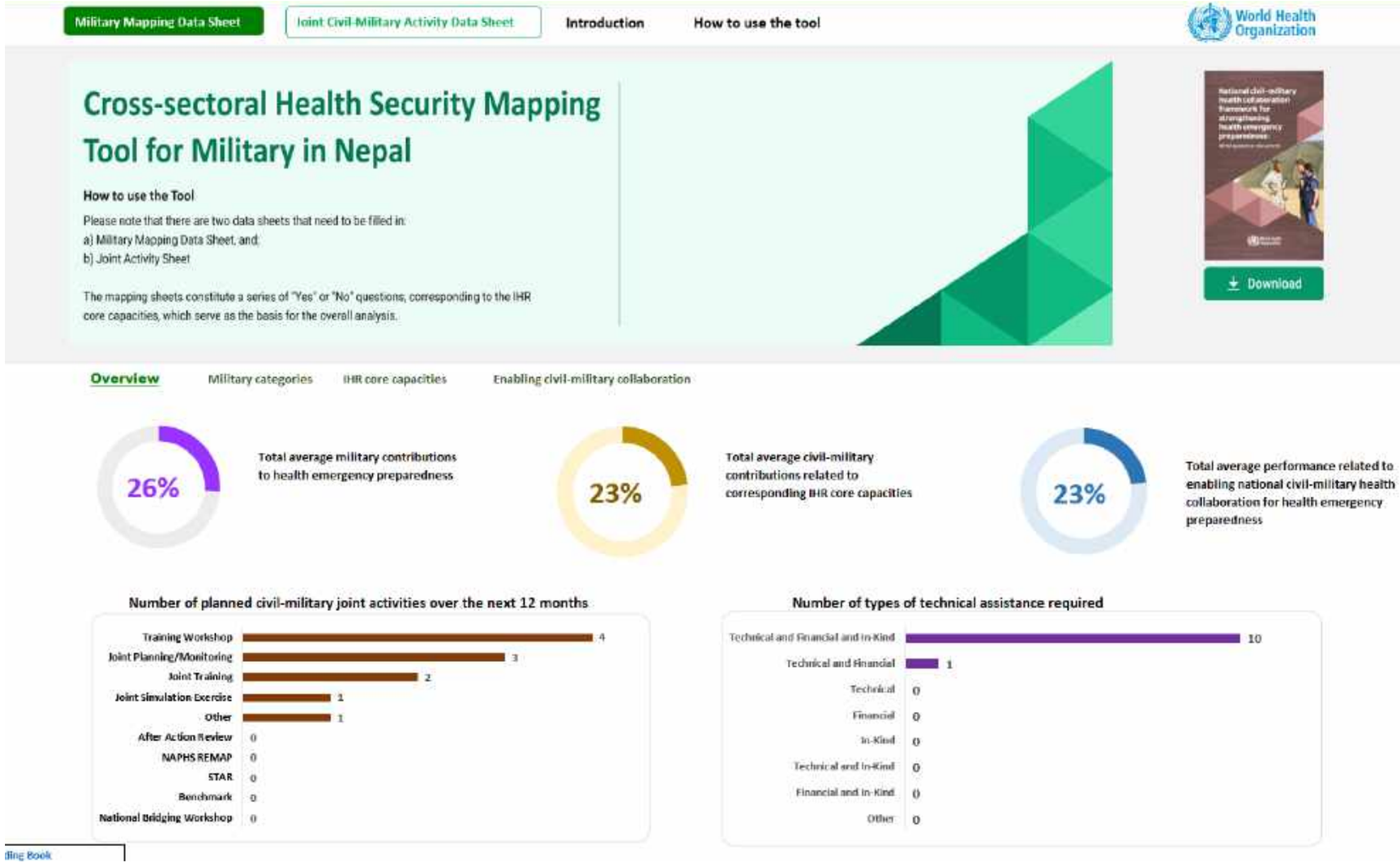
S.No.	Name	Organization	Designation
1	Udesh Kumar Shrestha	Health Directorate, Koshi Province	
2	Shambhu Narayan Pant	Health Directorate Suderpaschim Province	
3	Khaim Khadka	HD	
4	Sanjay Chaudary	HDU	
5	Maheshwor Shrestha	Health Directorate Bagmati Province	Director,

6	Arvind Yadav	Madesh Province	
7	Hari Ram Mahaiju	MAI Bagmati	
8	Chudamani Guragai	Ministry of law	
9	Dr Jeetendra Man Shrestha	MoALD	Chief, Vet Public Health
10	Dr Jeetendra Man Shrestha	MOALD	Chief vet. Public health
11	Dr Rabin Bhusal	MOH, Bagmati Province	
12	NajoRam Bhagat	MOHAI	
13	Dr Pramod Kumar Yadav	MoHP, Madesh Province	
14	Dheuba Gaida	MOIAL, Hetauda	
15	Gyan Prasad Dhakal	MoSD, Sudurpaschim Province	
16	Buddhi Sagar Adhikati	MOSD, Gandaki	
17	Dr Ramesh Kumar KC	MOSHA, Gandaki	
18	Ishwor Khatri	PHD	
19	Sanjip Pandit	PHD	
20	Dr Sathish Kumar Sah	PHD, Madesh Pradesh	
21	Anupama Bhusal	PHEOC, Koshi Province Biratnagar	

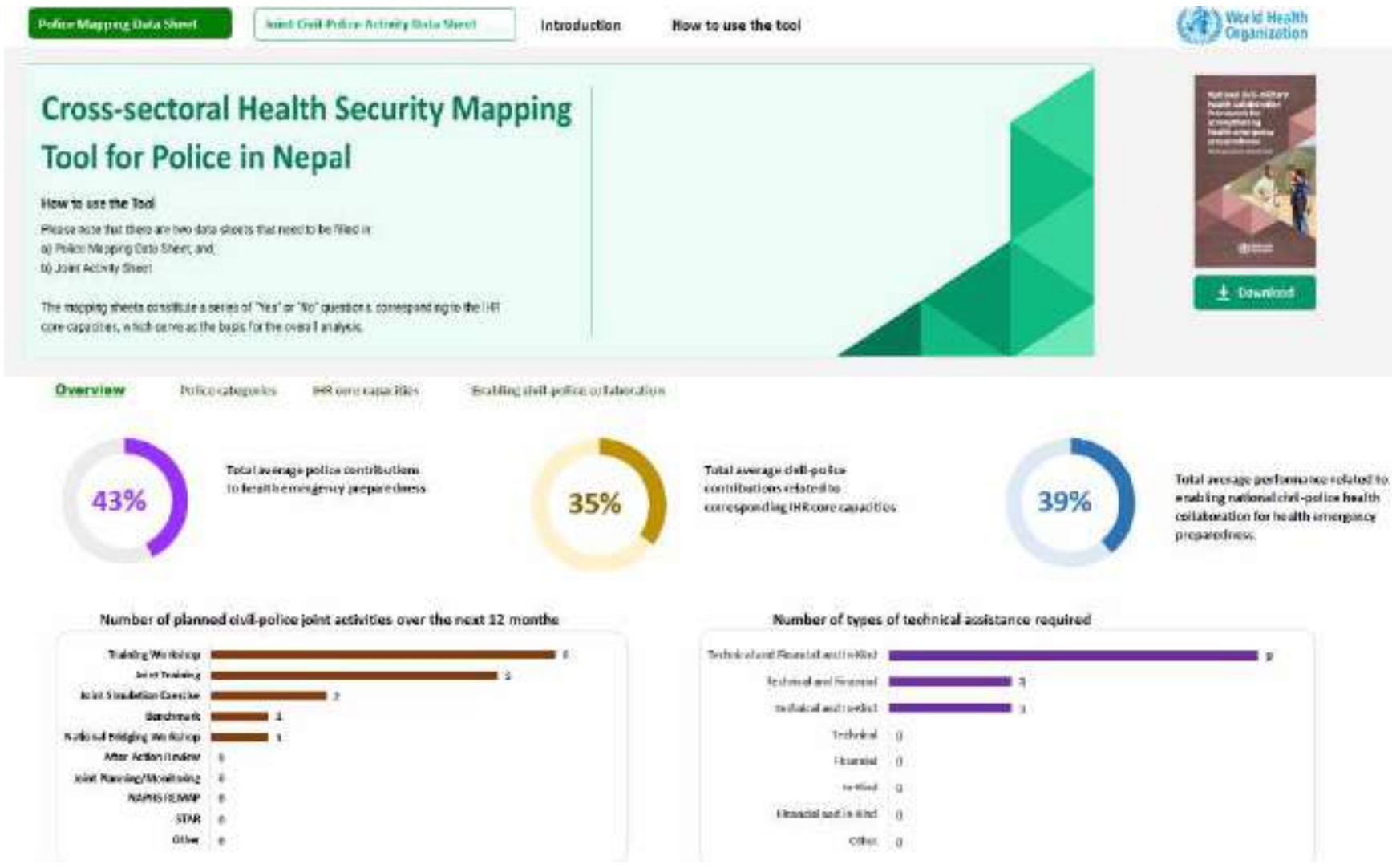
Representatives From World Health Organization

S.No.	Name		Designation
1	Dr Rajesh S. Pandav	WHO	WHO Representative, Nepal
2	Dr Sandip Shinde	WHO	Country Preparedness & IHR (CPI) Officer SEARO
3	Dr Amit K Singh	WHO	Health Emergency Officer
4	Dr Ashok Basnet	WHO	Field Medical Officer
5	Dr Allison Gocotano	WHO	Team Leader, Health Emergencies Program, Nepal
6	Dr Sabita Poudel	WHO	Field Medical Officer
7	Deepesh Sthapit	WHO	NPO, Health Information Management
8	Dr Irana Joshi	WHO	Hospital Preparedness Officer
9	Dr Saugat Shrestha	WHO	NPO, Infectious Hazard Management
10	Suresh Shrestha	WHO	Driver
11	Sudhan Gnawali	WHO	Communication and Liaison Officer
12	Samriddha Rana	WHO	NPO, Biomedical Engineer
13	Laxmi Magar	WHO	Driver
14	Chandra Tamang	WHO	Driver
15	Biraj Bhattarai	WHO	Admin and Finance
16	Dr Bigyan Prajapati	WHO	Health Emergency Officer
17	Dr Shrijana Singh	WHO	Hospital Preparedness Officer
18	Dr Sagar Poudel	WHO	Field Medical Officer
19	Dr Sunil Kr Thapa	WHO	Field Medical Officer

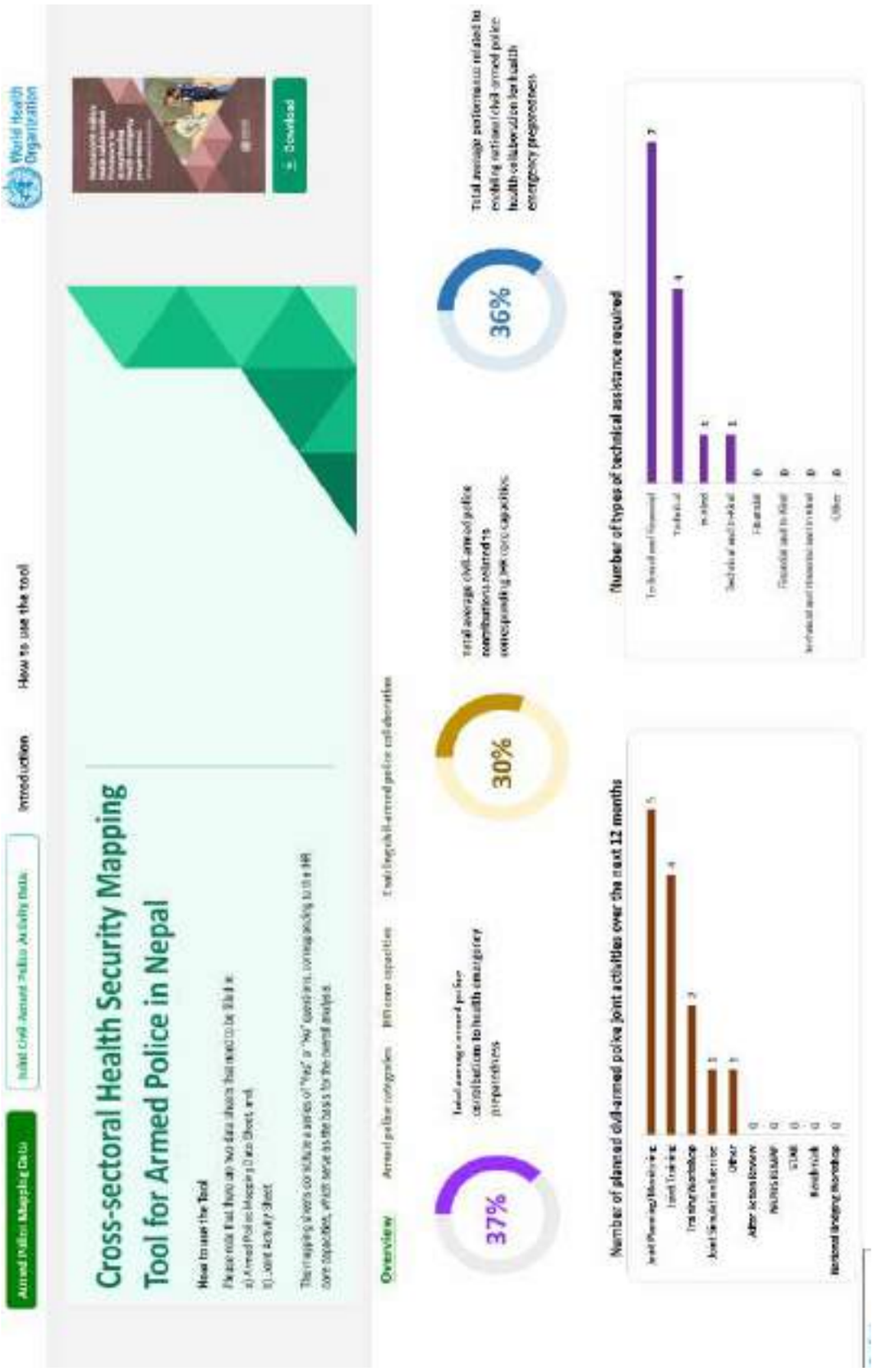
20	Dr Rajeeb Lalchan	WHO	Field Medical Officer
21	Dr Bhoj Raj Bam	WHO	Hospital Preparedness Officer
22	Dr Prakat Aryal	WHO	Field Medical Officer
23	Dr Mona Pradhan	WHO	Field Medical Officer
24	Dr Gaurav Devkota	WHO	Field Medical Officer
25	Dr Anant Nepal	WHO	Health Emergency Officer
26	Dr Ludy Suyantoro	WHO	Unit Head MHS, WHO HQ
27	Ganesh Dhami	WHO/HEOC	
28	Dr Subash Neupane	WHO/WHE	NPO, Project and Partnerships Management
29	Prahlad Dahal	WHO/WHE	NPO, Operations Support and Logistics
30	Avinash Kayastha	WHO/WHE	Health Emergency Intervention Officer
31	Sushil Kr. Singh	WHO/WHE	ICT Assistant


Military Mapping Data Sheet
Joint Civil-Military Activity Data Sheet
Introduction
How to use the tool
World Health Organization
Cross-sectoral Health Security Mapping Tool for Military in Nepal
How to use the Tool
Please note that there are two data sheets that need to be filled in:
a) Military Mapping Data Sheet, and;
b) Joint Activity Sheet
The mapping sheets constitute a series of "Yes" or "No" questions, corresponding to the IHR core capacities, which serve as the basis for the overall analysis.
Download
Overview
Military categories
IHR core capacities
Enabling civil-military collaboration
26%
Total average military contributions to health emergency preparedness
23%
Total average civil-military contributions related to corresponding IHR core capacities
23%
Total average performance related to enabling national civil-military health collaboration for health emergency preparedness
Number of planned civil-military joint activities over the next 12 months
Training Workshop 4
Joint Planning/Monitoring 3
Joint Training 2
Joint Simulation Exercise 1
Other 1
After Action Review 0
NAPHS REMAP 0
STAR 0
Benchmark 0
National Bridging Workshop 0
Number of types of technical assistance required
Technical and Financial and In-Kind 10
Technical and Financial 1
Technical 0
Financial 0
In-Kind 0
Technical and In-Kind 0
Financial and In-Kind 0
Other 0

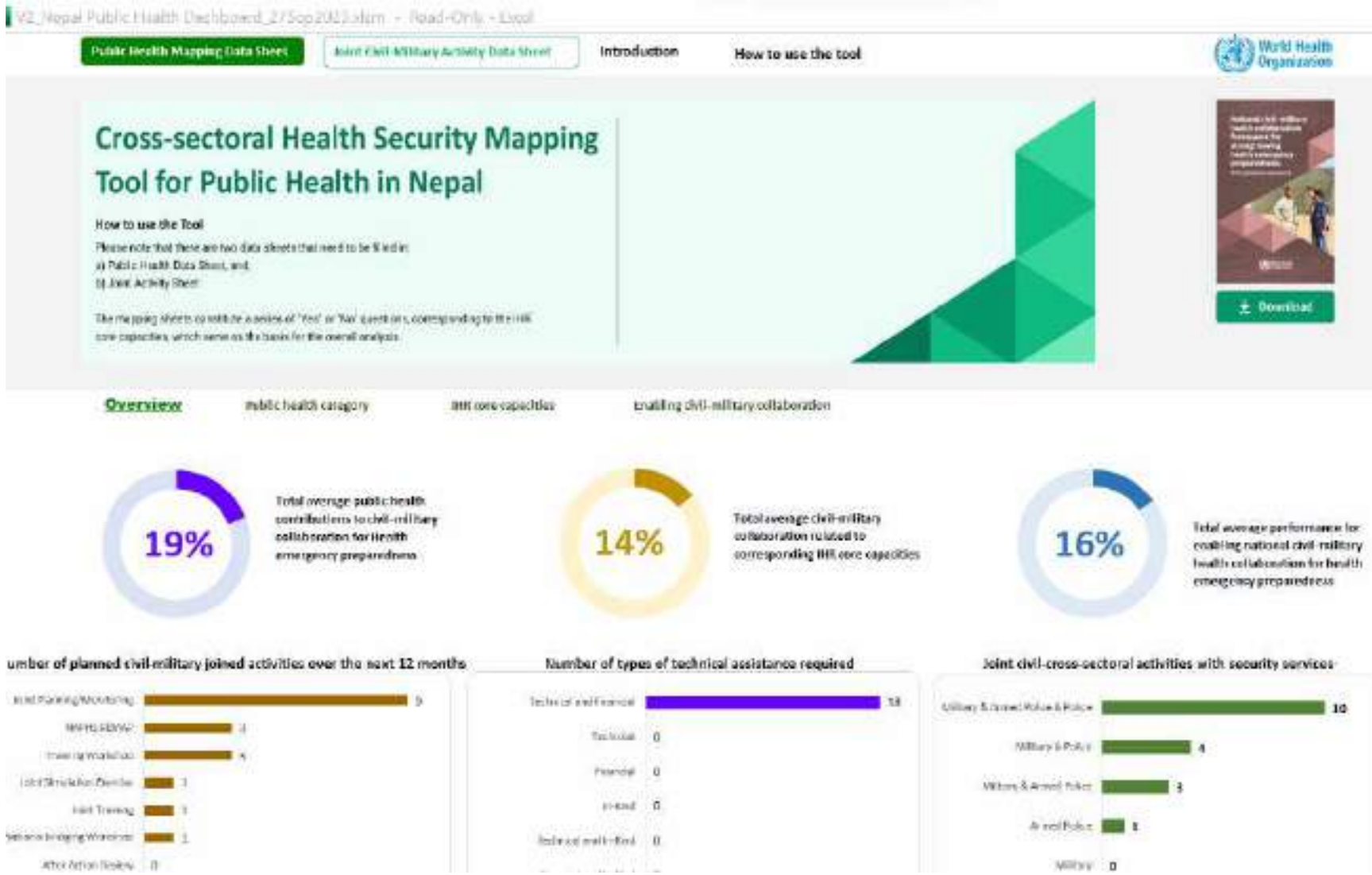
Annex 4. Dashboards of CMAP Tool, Nepal Police



Annex 5. Dashboards of CMAP Tool, Armed Police Force



Annex 6. Dashboards of CMAP Tool, Public Health



Annex 7. Summary of Breakout session 1 – Existing coordination between public health and security authorities

Strengths	Weaknesses	Opportunities	Best practices	The way forward
Leadership of the MoHA for multisectoral coordination	Lack of legal structure for collaboration	Coordination and collaboration for mechanism for RCCE	Search and destroy effort from Nepal Police in coordination with the public health sector during dengue outbreak	Single comprehensive appropriate legislation
COVID-19 Crisis Management Center and equivalent structures at the provincial and district levels – COVID response	Data management and dissemination			Joint training and capacity-building
At the district level: District Administration Office for coordination between the health sector and security agencies	Logistics availability			One door mechanism for data management
HEOC and EOC networks at the federal and provincial levels for coordination	Too many mechanisms – lack of a single comprehensive mechanism			Prepositioning
District Disaster Coordination Mechanism? Or District Disaster Management Committee	No one health at the local level		Snake bite management: collaborative efforts of Nepal Army and the health sector	Public communication

National Emergency Operation Center – for disaster/crisis	Isolation, holding and temporary relocation centre		Air rescue of high-risk pregnant woman from collaborative effort of district health office, DAO, Nepal Army, local level and provincial level governments	MoUs and SOPs
PoE – multisectoral involvement supported by CDO	Collaboration only during large disasters/ pandemics such as earthquakes and COVID	Cross-sectoral collaboration at the ground level for PoE	Mobile medical camps	Guidance to support management of PHE for NEOC
Available legislation 1. Constitution 2. DRRMA 3. PHSA and PHSR 4. Infectious Disease Act 5. Bird Flu control regulation 6. One Health Strategy 7. Radioactive Substance Act 8. APF Act 9. Nepal Police Act 10. Nepal Army Act 11. National Nuclear Policy 12. National Food Safety Policy	Weak insurance coverage for frontline responders (regardless of agencies)		Joint capacity-building activities: HOPE RRT Ambulance drivers EMT Basic oxygen system Users training on BMEs	Common interoperable reporting system/data management
SARI treatment facility	Implementation of available frameworks	Infectious Diseases Act – need to prioritize multisectoral coordination		Guideline for CBRN
	Political influences		Hub and satellite hospitals network	Joint simulation /drills
	Frequent turnover of trained staffs – loss of institutional memory			

Annex 8. Summary of Breakout session 2 – Joint activity

S.No.	Technical area	Joint activity
1	Policy, legal	Formulation/amendments
2	IHR-NFP	Amendments
3	Surveillance	Data and information management
4	Health service provision	Joint collaboration for essential drugs, equipment and human resources
		Critical care: capacity assessment and identification
		Joint orientation/sensitization on the developed guidelines
		Common EMR/EMS
5	Health emergency management	Joint capacity-building: drills and emergency-related trainings
6	Human resources	Joint monitoring
		Harmonized health workforce surge plan
		Common database on different specialists including hospitals
		All-hazard contingency plan for a predesignated referral system with segregated roles and responsibilities
		Joint capacity-building: drills and emergency-related trainings
7	PoE	Joint planning and monitoring
8	RCCE	Collaborative development of RCCE materials and dissemination through designated spokespersons
9	Laboratories	Joint capacity-building
		Regular meeting
		Laboratory accreditation
		Risk communication
10	CBRN	Joint planning
11	Food safety	Collaboration for sensitization and tasking
12	IPC	

Annex 9. Joint activity workplan – Nepal Army and public health

S.No.	Technical area	Joint activities	Activity details	Required enabling factor	Remarks (details on enabling factor)	Timeline	Frequency
1	Health emergency management	Joint planning and monitoring	Development of joint SOP (Lead --> MoHA)	High-level commitment	Multisectoral coordination committee	Within 1 year	One time with periodic review
		Joint training	Disaster-related trainings (Lead: MoHA --> NDRRMA)	Others	Financial resources	Within 2 years	Biannual
		Joint simulation exercise	Simulation on joint SOP (Lead: MoHA --> NDRRMA), all stakeholders to participate from planning to AAR	MoUs	Along with financial support	Within 2 years	Annual
2	Laboratory	National bridging workshop	Collaboration with existing laboratory networks (Lead: MoHP)	Legal framework	Binding the different available policies	Within 1 year	One time with periodic review
		Others	Cross-sectoral capacity-building in terms of detection and biosafety (Lead: NPHL and CVL)	High-level commitment	Multisectoral coordination committee, financial resources	Within 5 years	One time with periodic review

3	Chemical events	Joint planning and monitoring	Development of joint SOP, stakeholders to be included are MoHA, MoHP, MoALD, MoEST, MoD, MoF, MoFA, MoTourism	High-level commitment	High-level coordination committee	Within 1 year	One time with periodic review
		Joint training	Comprehensive training on chemical hazard mass casualty	Others	Financial resources and technical experts	Within 2 years	Ad hoc
4	Radiation emergencies	Joint planning and monitoring	Development of joint SOP stakeholders to be included are MoHA, MoHP, MoALD, MoEST, MoD, MoF, MoFA, MoTourism	High-level commitment	High level coordination committee	Within 1 year	One time with periodic review
		Joint training	Comprehensive training on radiation hazard mass casualty	Others	Financial resources and technical experts	Within 2 years	Ad hoc
		Others	CBRN waste assessment, SOP for disposal	Legal framework	Strict implementation including punitive actions	Within 2 years	One time with periodic review
5	Infection prevention and control	Joint planning and monitoring	Joint Health Crisis Management Center (JHCMC)	High-level commitment	Multisectoral coordination committee	Within 2 years	One time with periodic review

6	Health service provision	Others	Medical and non-medical logistics	Others	Financial resources	Within 2 years	One time with periodic review
			Insurance	SOP	Financial resources	Within 2 years	Ad hoc
			Mental health	SOP	Multisectoral coordination	Within 2 years	Ad hoc
			Specialized hospital for Haz-Mat (hazardous material) case treatment under the lead of MoD and in close collaboration at least with MoHP and MoHA	High-level commitment	Multi-ministerial coordination	Within 5 years	One time with periodic review
7	Policy, legal and normative instrument to implement IHR	National bridging workshop	Legal framework review and amendments related to public health emergencies	High-level commitment	Multi-ministerial coordination	Within 2 years	Ad hoc
		Joint planning and monitoring	Central database (surveillance, laboratory, HR, experts)	High-level commitment	Multi-ministerial coordination	Within 2 years	Ad hoc

Annex 10. Joint activity workplan – Nepal Police and public health

	Technical area	Joint activities		Activity details	Enabling factor	Required enabling factor	Remarks (details on enabling factor)	Timeline	Frequency
1	Policy, legal and normative instrument to implement IHR	Others	1. Establishment of a national committee for collaboration of public health and security agencies	1. Steering committee formation 2. MoU for steering committee (public health, animal health, Nepal Army, Nepal Police and APF) 3. Define TOR of steering committee members (Chair: Secretary of office of PM, Members: Secretaries of MoHP, MoD, MoHA, MoALD, MoWS) 4. Define TOR for public health, Nepal Army, Nepal Police and APF 5. Sensitization workshop of the steering committee members 6. Development of TOR for Joint Task Force/National Working Group 7. Review and coordination meetings	1. Legal provision for the formation of steering committee 2. MOUs among involved ministries (health, defence, home, agriculture and livestock, drinking water) 3. Guidance and SOPs for the steering committee and Joint Task Force/ National Working Group functioning	Others	Technical area activity details to be considered for NAPHS capacity-building plan and capitalization	Within 1 year	One time with periodic review
			2. Establishment of a Joint Task Force/ National Working Group of public health and security agencies	1. Formation of a Joint Task Force/ National Working Group (Chief of Army Staff, IGP Nepal Police, IGP APF, DG DoHS, DG DLS, DG DFTQC, DG drinking water and sanitation) 2. Sensitization workshop of Joint Task Force/National Working Group 3. Review and coordination meetings	High-level commitment			Within 1 year	Quarterly

	Technical area	Joint activities		Activity details	Enabling factor	Required enabling factor	Remarks (details on enabling factor)	Timeline	Frequency
2	Health emergency management	Joint training	1. Establishment of agreement for joint trainings agreed through steering committee and task force	1. Conduct needs assessment for trainings among the stakeholders 2. Develop training programme and curriculum 3. Development of a pool of trainers and list of trainees 4. Preparation of a training calendar 5. Roll-out of trainings at all levels of government 6. Conduct refresher trainings on a regular basis 7. Conduct post-training evaluations	1. MoU with the National Health Training Center formalize through the Joint Task Force		Technical area activity details to be considered for NAPHS capacity-building plan and capitalization	Within 1 year	Annual
		Joint simulation exercise		1. Conduct meeting of Joint Task Force 2. Planning of the scenarios and role divisions 3. Resource mobilization: logistic, HR, experts 4. Arrangement of media coverage 5. Conduction of exercise and reporting	1. Allocation of resources (financial, logistics, HR, experts) 2. SOP, guidelines, protocols, injects 3. Inter-agency commitment/ collaboration				
3	Health service provision	Others	1. Reinforcing the operationalization of mobile treatment teams	1. Establishment of mobile treatment teams 2. Trainings and capacity-building	1. Allocation of budget 2. High-level commitment 3. SOP and protocols			Within 5 years	One time with periodic review

	Technical area	Joint activities		Activity details	Enabling factor	Required enabling factor	Remarks (details on enabling factor)	Timeline	Frequency
4	Laboratory	Joint training		1. Facilitation by steering committee with MoU between public health laboratories and Nepal Police 2. Needs assessment 3. Identification of focal points at both agencies 4. Conduction of meetings between focal points and subsequent workshop 5. Preparation of training modules				Within 1 year	Annual
5	Risk communication and community engagement	Joint training	Building capacity for a community-centred approach for effective RCCE	1. Formation of subcommittee and nomination of focal persons at the community level (chaired by chief of municipality, local level police commander, security agencies commander at the local level) 2. Preparation of IEC materials, common messages and its dissemination 3. Development of joint risk communication plan 4. Conduct advocacy, education and awareness campaign				Within 1 year	Ad hoc
		Joint planning and monitoring		1. Development of a common checklist 2. Formation of a joint assessment team 3. Development of a monitoring plan					
6	Surveillance	Others	Establishing an online mechanism for alert and information sharing	1. Development of a common platform for information dissemination 2. Provision of access to both public and security agencies to the surveillance system	1. Resource allocation 2. High-level commitment			Within 1 year	Ad hoc

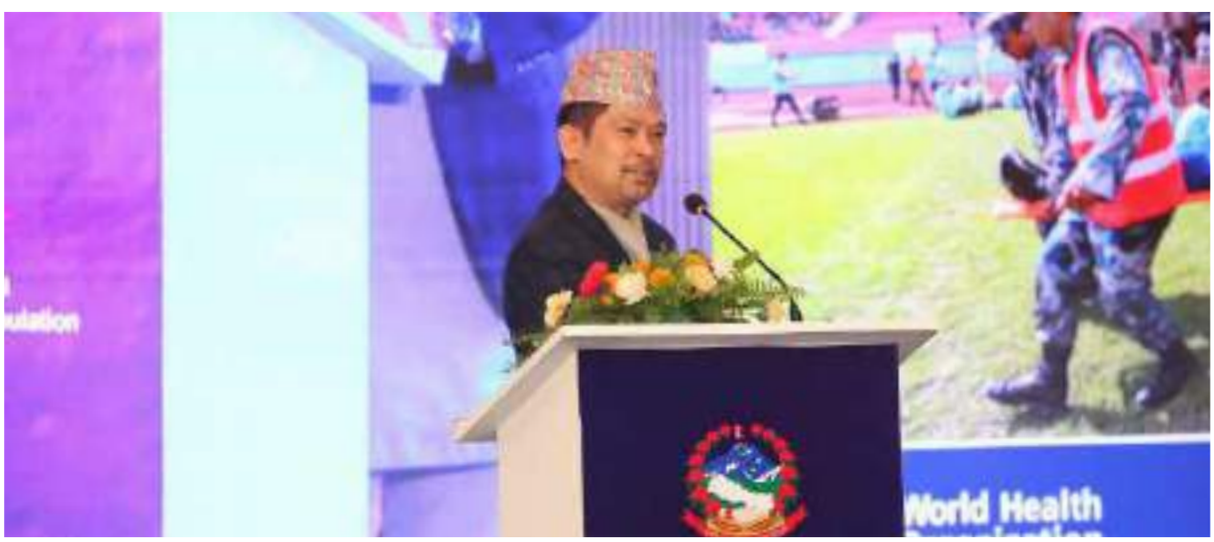
Annex 11. Joint activity workplan – Armed Police Force and public health

S.No.	Technical area	Joint activities	Activity details	Required enabling factor	Remarks (details on enabling factor)	Timeline	Frequency
1	Policy, legal and normative instrument to implement IHR	Others	Endorsement of civil security forces with collaboration through legislation	Legal framework	Lack of well-defined TORs, which requires amendments of existing Acts/regulations (DRRM Act) and need supplementary/annexes	Within 2 years	One time with periodic review
2	Policy, legal and normative instrument to implement IHR	Others	Joint activity to prevent health emergencies (e.g. search and destroy for dengue prevention)	Legal framework	Amendment of existing Acts/regulations (linkage of PHSA at the national level campaign) – SOPs, annexes, etc.	Within 2 year	One time with periodic review
3	Health emergency management	After-action review	Establish or practice of debriefing after a joint response to public health events	SOP	Draft a generic form of SOP on conducting after-action review/debriefing	Within 1 year	One time with periodic review
4	Laboratory	Joint planning and monitoring	Updating the existing laboratory (review and update the existing laboratory in terms of HR, equipment, infrastructure, policies and procedures)	High-level commitment	Capacity enhancement	Within 1 year	One time with periodic review
5	Laboratory	Others	Establishment of CBRN reference laboratory at the federal level	High-level commitment		Within 5 years	One time with periodic review

S.No.	Technical area	Joint activities	Activity details	Required enabling factor	Remarks (details on enabling factor)	Timeline	Frequency
6	Point of entry and border health	Joint planning and monitoring	Integrated checkpoint and health desk management at ground crossings	High-level commitment	Initiation of process from the MoHA	Within 5 years	One time with periodic review
7	Health emergency management	Joint simulation exercise	Joint simulation exercises for multiple scenarios	High-level commitment	Preparation of simex packages	Within 2 years	Annual
8	Health emergency management	Others	Enabling ambulance dispatch services under a harmonized approach/inter-operability system	SOP	Mechanism for interagency cooperation/coordination	Within 1 year	One time with periodic review
9	Human resources	Joint training	Emergency and disaster (community first responder, pre-hospital care), critical care-related training for health emergency response	Others	Request letter from APF hospital for accreditation of APF hospital as training site followed by necessary support from NHTC, strategic planning for joint collaboration in conducting training for public health-related capacity enhancement	Within 1 year	One time
10	Health emergency management	Joint planning and monitoring	Develop operational plan for a SARI facility	High-level commitment	Develop an operational plan in addition to regular SARI dismantling and installment exercises (once in 5 year vs/ or need-based exercise)	Within 1 year	One time

S.No.	Technical area	Joint activities	Activity details	Required enabling factor	Remarks (details on enabling factor)	Timeline	Frequency
11	Health emergency management	Joint planning monitoring	Joint planning for logistic pre-positioning	High-level commitment	SOPs for restocking, consumption of logistic during the shelf-life, equitable location of emergency medical warehouse (SOP for emergency supply chain management)	Within 2 years	One time with periodic review
12	Chemical events	Joint planning and monitoring	Develop hospital-based SOP for decontamination and primary management of CBRN cases	SOP	Technical expertise to develop the SOP for CBRN-related event (hospital-based event, to manage cases onsite/ hospital and mobile team to deploy to incident site)	Within 2 years	One time with periodic review
13	Radiation emergencies	Joint planning and monitoring	Develop hospital-based SOP for decontamination and primary management of CBRN cases	SOP	Technical expertise to develop the SOP for CBRN-related events (hospital-based events, to manage cases onsite/ hospital and mobile team to deploy to incident site)	Within 2 years	One time with periodic review

Annex 12. Photo Gallery

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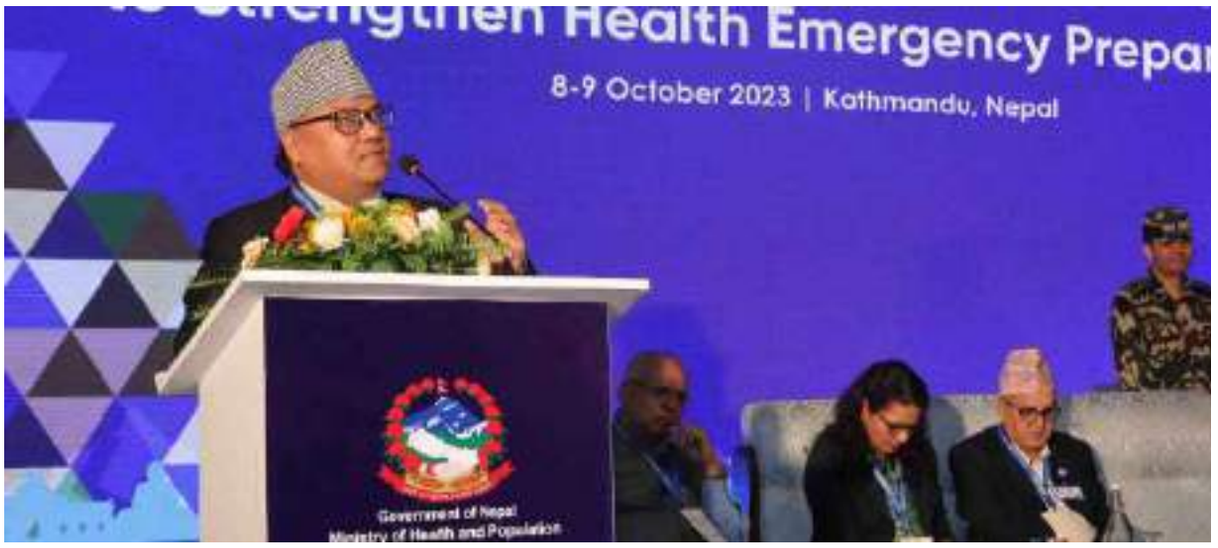
Government of Nepal


Kathmandu, Nepal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Ministry of Health and Population


Army, Nepal Police and Armed Police Force
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Ministry of Health and Population


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Ministry of Health and Population


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Formation of EM
in Nepal.
Proactive role in


Capacity enhar
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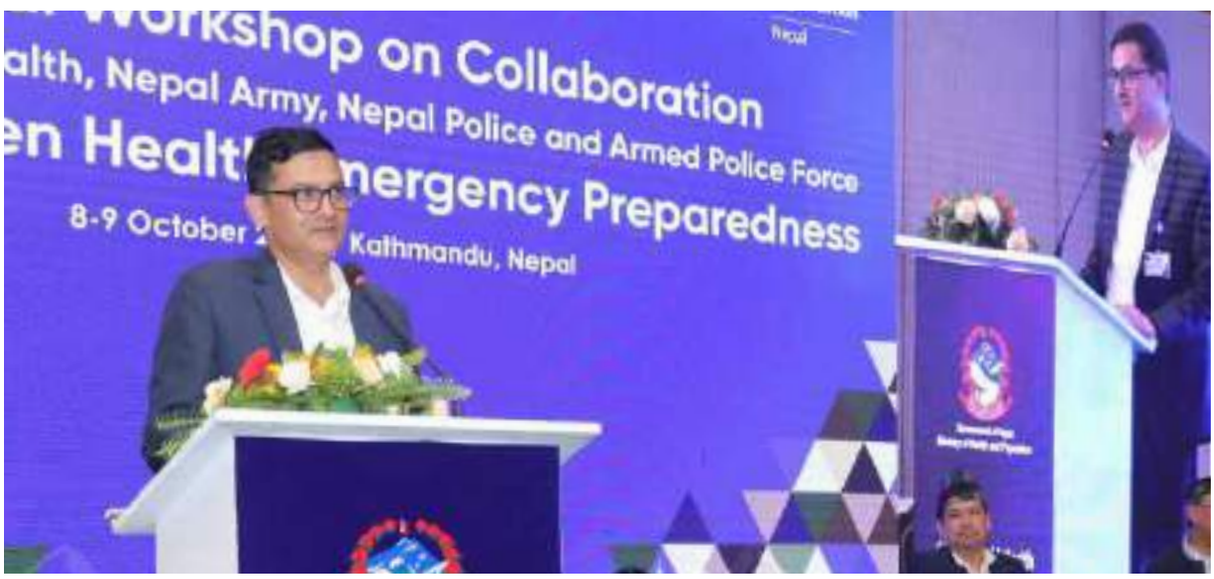
Strengthen PE


2. CBRN capabil
1. Food safety
2. Zoonotic events
3. CBRN
4. Laboratory


Laboratory
60%
Health service provision


Workshop on Collaboration
alth, Nepal Army, Nepal Police and Armed Police Force
nergency Preparedness
Kathmandu, Nepal


National Workshop on Collaboration
to Strengthen
Preparedness


National Workshop on Collaboration
to Strengthen Health Emergency Preparedness

Book Design: Shreya Shrestha, WHO Nepal