

Annual Regional Meeting on Pandemic Influenza Preparedness (PIP) Partnership Contribution (PC) and WHO's Preparedness and Resilience for Emerging Threats (PRET) Implementation in SEAR

**27–30 October 2025
Colombo, Sri Lanka**



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Partnership Contribution (PC) and
WHO's Preparedness and Resilience for
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Implementation
in SEAR**

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Colombo, Sri Lanka

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List of Abbreviations and Acronyms

BoD	Burden of Disease
COVID-19	Coronavirus Disease 2019
DHIS-2	District Health Information System 2
DPR Korea	Democratic People's Republic of Korea
EPP	Epidemic and Pandemic Preparedness and Prevention
EQAP	External Quality Assurance Programme
EUA	Emergency Use Authorizations
GIP	Global Influenza Programme
GISRS	Global Influenza Surveillance and Response System
HEPR	Health Emergency Preparedness and Response
HLIP	High-Level Implementation Plan
IDSP-IHIP	Integrated Disease Surveillance Programme–Integrated Health Information Platform
ILI	Influenza-Like Illness
MoH	Ministry of Health
NDVP	National Deployment and Vaccination Plan
NEWARS	National Early Warning Alert Response Surveillance
NIC	National Influenza Centre
NIPPP	National Influenza Pandemic Preparedness Plan
NRA	National Regulatory Authority
PCITEM	Partnership Contribution Independent Technical Expert Mechanism
PIP	Pandemic Influenza Preparedness
PIP-PC	Pandemic Influenza Preparedness Partnership Contribution
PIRM	Pandemic Influenza Risk Management
PISA	Pandemic Influenza Severity Assessment
PRET	Preparedness and Resilience for Emerging Threats
RCCM	Risk Communication and Community Mobilization
RSV	Respiratory Syncytial Virus
SARI	Severe Acute Respiratory Illness

SARS	Severe Acute Respiratory Syndrome
SEAR	South-East Asia Region
SEARO	South-East Asia Regional Office
SimEx	Simulation exercise
WHO	World Health Organization
WHO CC	World Health Organization Collaborating Centre
WHE	WHO Health Emergencies Programme
ZIDAR	Zoonotic Influenza Distribution Assessment and Ranking

1. Introduction

The Pandemic Influenza Preparedness (PIP) Framework is a central component of the global system for managing the risk of influenza pandemics and ensuring equitable access to life-saving benefits derived from the global sharing of influenza viruses. Established by the World Health Assembly in 2011, the Framework formalised long-standing principles of global solidarity by linking access to influenza viruses with pandemic potential to the fair and equitable distribution of vaccines, antivirals, diagnostics and other essential benefits.

Through the operation of the Global Influenza Surveillance and Response System (GISRS), the Framework strengthens national and global capacities to detect, characterise and assess emerging influenza strains, thereby enhancing collective preparedness for influenza pandemics.

The Partnership Contribution (PC) mechanism is a core component of the Framework, providing predictable financing from industry partners to support capacity-building in eligible countries. This support is channelled through the High-Level Implementation Plan (HLIP), which outlines priority areas and expected results for each multi-year implementation period.

Across its three cycles, the HLIP has progressively expanded the scope and maturity of influenza preparedness capacities. HLIP I (2014–2017) focused on establishing foundational systems, particularly laboratory diagnostics, surveillance platforms and early warning capacities in PC-eligible countries. HLIP II (2018–2023) strengthened and diversified these systems, addressing regulatory readiness, operational response capacities, risk communication and multisectoral coordination.

Building on these achievements, HLIP III (2024–2030) represents the most comprehensive phase to date. It aims to consolidate gains, further strengthen operational and regulatory systems for influenza, and enhance preparedness for respiratory pathogens more broadly, incorporating lessons learned from the coronavirus disease (COVID-19) pandemic.

HLIP III places particular emphasis on sustainable national systems, institutionalised preparedness functions, and alignment with the WHO global architecture for health emergency preparedness, response and resilience (HEPR).

Annual regional meetings are an essential mechanism for advancing these objectives. They provide a structured forum for countries to review progress, identify constraints and ensure that implementation remains aligned with HLIP priorities and performance expectations. The meetings also facilitate continuous dialogue among Member States, WHO country offices, the Regional Office, the PIP Secretariat and the PIP Advisory Group, ensuring that technical guidance is context-specific and that challenges are addressed collaboratively.

Beyond their monitoring function, the meetings enable peer learning, promote harmonisation across the Region, and support the adaptation of global tools and standards to the operational realities of the WHO South-East Asia Region (SEAR). Given

the evolving nature of pandemic risks, these annual reviews serve as a critical platform for accountability and learning, helping to sustain momentum and guide course correction during implementation.

The strategic direction of HLIP III aligns closely with WHO's Preparedness and Resilience for Emerging Threats (PRET) initiative. PRET emphasises hazard-agnostic readiness for respiratory pathogens with pandemic potential and promotes strengthened multisectoral coordination, risk assessment, rapid decision-making and community engagement capacities.

Using structured simulation exercises (SimEx), scenario-based planning and systematic learning, PRET supports countries to test and refine plans and operational systems of their implementation in real time. Embedding these exercises within national preparedness cycles provides countries with the opportunity to validate coordination mechanisms, enhance interoperability across the human, animal and environmental health sectors, and identify practical gaps requiring further investment.

This alignment between PIP-PC and PRET has reinforced the Region's shift towards integrated, sustainable and operationally ready preparedness systems capable of managing influenza and other emerging respiratory threats.

Last year, within this evolving regional and global landscape, the Annual Review Meeting on PIP-PC implementation was convened from 15 to 16 October 2024 in New Delhi, followed by a multicounty simulation exercise (SimEx) on PRET from 17 to 18 October 2024.

The meeting reaffirmed the Region's commitment to advancing implementation of influenza and other respiratory pathogen pandemic planning under HLIP III and highlighted the need for more efficient utilisation of funds, strengthened reporting mechanisms and improved monitoring of indicators. Participants underscored the continued importance of maintaining core capacities for handling influenza and other respiratory threats, updating national preparedness plans, and sustaining the laboratory and surveillance improvements achieved during earlier HLIP cycles.

The PRET SimEx further demonstrated the value of practical readiness activities in enhancing decision-making, operational coordination and multisectoral collaboration.

The conclusions of the 2024 meeting identified several priority areas for the coming years. Countries emphasised the importance of continued strengthening of surveillance systems, including improvements to Influenza-Like Illness (ILI) and Severe Acute Respiratory Illness (SARI) platforms, refinement of testing strategies, and maintenance of high-quality laboratory functions.

Participants recognised the need to reinforce risk communication and community engagement (RCCE) activities, enhance national regulatory readiness, and ensure that mechanisms for the allocation and deployment of medical countermeasures are regularly reviewed and updated. They also highlighted the importance of integrating influenza preparedness within broader communicable disease and emergency response structures,

leveraging domestic and partner resources, and systematically documenting lessons learned for regional and global reporting.

The meeting called for continued quarterly reviews, more consistent use of monitoring tools, and strengthened collaboration with WHO country and regional offices to ensure the timely delivery of biennial workplans

Building on these discussions and in keeping with the Region's commitment to sustained, collective progress, the Annual Regional Meeting on PIP-PC and PRET implementation was convened in 2025. Hosted in Colombo, Sri Lanka, from 27 to 30 October 2025, the meeting provided an opportunity to review HLIP III implementation, assess progress against the 2024 meeting recommendations, and ensure that countries remain on track to achieve the targets set for 2025 and beyond.

As the Region continues to navigate evolving influenza and other respiratory pathogen threats, the 2025 meeting aimed to consolidate the regional preparedness landscape, advance multisectoral coordination, and reinforce the shared resolve to strengthen pandemic influenza preparedness and readiness across all Member States.

2. Meeting Objectives

2.1 General Objective

The general objective of the meeting was to review progress of implementation of the current PIP-PC biennial workplans (2024-2025), apply the findings for joint and effective implementation of the 2026-27 biennium workplans, and consult on the draft regional roadmap and action framework for implementing the PRET initiative in the WHO SEAR.

2.2 Specific Objectives

The specific objectives of the meeting were:

- To review implementation of country-specific, PIP-PC biennial workplans (2024-25) in SEAR, with the aim of understanding broad implementation issues, challenges, and key compliance concerns to,
 - collectively address WHO biennium closure administrative and financial requirements,
 - ensure project compliance,
 - document achievements,
- and applying lessons learned for more effective implementation of new, country specific PIP-PC biennial plans for 2026-27
- To discuss proposed SEAR-specific new biennial (2026-27) country-based workplans for Outputs 1 and 2 and the Head Quarters (HQ)/Regional Office (RO)-led workplans for Outputs 3 and 4, with a view to
 - organizing technical support through all levels of WHO, technical partners, agencies and WHO Collaborating Centres (WHO CC)

- Planning for adhering to monitoring and evaluation(M&E) framework indicators including (1) agreement on targets, (2) reporting frequencies and (3) documentation and sharing of quality ensured and impactful PIP-PC deliverables as envisioned
- To review and document observations and feedback from representatives of Member States, partners, all three levels of WHO, and invited technical experts on the key components of the draft Regional Roadmap and Action Framework for implementing PRET-based pathogen pandemic preparedness and response plans (including National Influenza Pandemic Preparedness and Response Plans) in the WHO South-East Asia Region (SEAR).

3. Overview

The Annual Regional Meeting on PIP-PC and WHO's PRET Implementation in the South-East Asia Region (SEAR) was conducted as a four-day event comprising two main components. The first two days focused on **Component I**: the Annual Regional Meeting on PIP-PC in SEAR, while the final two days were dedicated to **Component II**: National Influenza Pandemic Preparedness and Response Plans (NIPPP) and PRET.

Specific objectives 1 and 2 corresponded to Component I, while specific objective 3 related to Component II. Across both components, the presentations and discussions were organised in a logical and thematic sequence, with plenary sessions arranged cohesively to achieve the stated objectives, as outlined below.

Component I: Annual Regional Meeting on PIP-PC in SEAR		
Day 1	Plenary I	Updates on HLIP III (2024-30)
	Plenary II	Monitoring and Evaluation of HLIP III
	Plenary III	Review of Implementation of HLIP III Outputs in SEAR MS (Output 1)
	Plenary IV	Best Practices Sharing by Invited Technical/Academic Experts/Groups/Centres Mobilized by SEARO and/or MS
Day 2	Plenary V	Review of Implementation of Non-Country Based Workplans in SEAR
	Plenary VI	Updates from Global PIP Advisory Group Members
Component II: NIPPP and PRET		
Day 3	Plenary I	Updates on PRET Initiative Implementation/NIPPP
	Plenary II	Landscape of NIPPP & PRET Planning in SEAR
	Plenary III	Review of Proposed Regional Roadmap and Action Framework for PRET Implementation
Day 4	Group Work I	Consultations on the Vision, Goal, and Strategic Objectives and Pillars of the Roadmap to implement PRET in SEAR
	Plenary IV	Group Presentations on Key Observations and Recommendations
	Group Work II	Consultation on the Strategic Action Framework to Implement PRET in SEAR

4. Component I: Annual Regional Meeting on PIP-PC in SEAR

Day 1: 27 October 2025

4.1 Opening Session

Dr Nilesh Buddha, Regional Emergency Director of WHO-SEARO, delivered the opening remarks virtually and welcomed all participants, including representatives from PIP-PC recipient Member States, the PIP Secretariat at WHO headquarters, regional and country office focal points, members of the PIP-PC Advisory Group, academia, centres of excellence and other partners. He emphasised the shared commitment to strengthening pandemic preparedness and response across the Region.

Dr Buddha noted that the meeting took place shortly after the adoption of the historic Pandemic Accord in May 2024, which reinforced global solidarity, equitable access to medical countermeasures, and the establishment of a pathogen access and benefit-sharing mechanism.

He underscored ongoing challenges, particularly the significant global underinvestment in health emergency preparedness affecting low- and middle-income countries and stressed the need to close this gap to ensure equity and resilience. He further emphasised the importance of the PIP-PC in building robust systems aligned with the Global Influenza Surveillance and Response System (GISRS) and WHO's PRET initiative.

Dr Buddha welcomed the development of a Regional Roadmap for PRET-based respiratory pathogen pandemic preparedness plans, grounded in existing regional health security and diagnostic preparedness efforts. He encouraged participants to adopt a forward-looking approach in reviewing PIP-PC fund utilisation and planning for the next biennium, reminding them that there is no peacetime in pandemic preparedness.

He concluded by calling for continued collaboration to advance practical, evidence-informed plans and thanked the organising team for facilitating the meeting.

Following Dr Buddha's opening remarks, Dr Asela Gunawardena, Director General of Health Services, Ministry of Health, Sri Lanka, welcomed all participants and highlighted the critical role of the PIP-PC and the PRET initiative in strengthening Sri Lanka's national preparedness systems.

He further noted that, with WHO support, Sri Lanka has enhanced its capacity for transparent data and virus sharing, equitable access to vaccines and diagnostics, and operational readiness through laboratory strengthening, simulation exercises and training.

He emphasised that regional solidarity, science-based action and partnerships with WHO, academia and civil society are essential to ensure that the South-East Asia Region (SEAR) remains vigilant, resilient and prepared for future health threats.

Dr Momoe Takeuchi, Officer in Charge, WHO Sri Lanka, then addressed the gathering and highlighted that Sri Lanka, included for the first time as a recipient of PIP-PC in the 2024–2025 biennium, has made significant progress in strengthening its influenza preparedness and response capacities. She noted that these achievements reflect the strong leadership of the Ministry of Health and the dedication of the Epidemiology Unit and the National Influenza Centre in translating global PIP principles into national action.

Dr Takeuchi further observed that PIP and PRET together provide a pathway from global solidarity to national capability and called for continued regional collaboration to build systems that are prepared, resilient and equitable in the face of future pandemics. She expressed her gratitude to WHO, the PIP Secretariat and partners for their guidance and partnership.

Following these addresses, Dr Pushpa Ranjan Wijesinghe, Programme Area Manager for Infectious Hazard Management (IHM) at the WHO Health Emergencies Programme (WHE), WHO South-East Asia Region (SEAR), delivered a concise presentation outlining the objectives and expected outcomes of the meeting.

He reiterated that the overall objective was to review progress in implementing the current PIP-PC biennial workplans (2024–2025), use the findings to support joint and effective implementation of the next biennium workplans, and consult on the draft regional roadmap and action framework for operationalising the PRET initiative in the WHO South-East Asia Region.

In addition to the specific objectives outlined earlier, she further highlighted the key outcomes anticipated from the meeting, as follows.

- Identification of WHO SEAR-specific implementation issues, challenges and key compliance concerns related to PIP-PC workplan implementation.
- Sharing of best practices and notable contributions from partner agencies, individual experts and academia in delivering high-quality PIP-PC outputs during the 2024–2025 biennium.
- An outline of the way forward for implementing PIP-PC workplans in the WHO South-East Asia Region during the forthcoming 2026–2027 biennium.
- Agreement on:
 - targets;
 - reporting frequency; and
 - documentation and sharing of quality-assured and impactful PIP-PC outputs by all recipient countries.
- Consolidated participant observations and feedback on the proposed draft Regional Roadmap and Action Framework to inform its finalisation and approval by WHO's Policy and Publications Group.

Ms Reena John, Programme Associate, IHM, WHO Health Emergencies Programme, WHO SEAR, provided the administrative briefing for the meeting. She outlined the logistical arrangements and procedural requirements to ensure the smooth conduct of the sessions.

She also underscored the importance of strict adherence to the WHO Policy on Preventing and Addressing Sexual Misconduct, reminding all participants of their collective responsibility to maintain a safe, respectful and accountable environment throughout the meeting.

Following the opening remarks, discussion of objectives, and administrative announcements, the Chair and Co-chair of the meeting were formally announced. Dr Pushpa Ranjan Wijesinghe introduced Dr Sanket Kulkarni, Joint Director of the National Centre for Disease Control, Integrated Disease Surveillance Programme, India, as the Chair. He further announced Ms Isabel Maria Gomes, Head of the Surveillance and Epidemiology Department, Ministry of Health, Timor-Leste, as the Co-chair. In addition, Prof Nuwan Wickramasinghe, Chair Professor of Community Medicine at Rajarata University, Sri Lanka, was designated as the rapporteur for the meeting. Following these introductions, Dr Wijesinghe handed over the proceedings to the Chair and Co-chair, who then commenced the technical sessions of the annual PIP review meeting.

5. Plenary Session I: Updates on HLIP III (2024-2030)

5.1 PIP Framework - Global Update: Dr Jennifer Barragan Fromme, Team Lead, Pandemic Influenza Preparedness (PIP), Global Respiratory Threats, WHO Headquarters

The session commenced with a global progress update delivered virtually by **Jennifer Barragan Fromme**, WHO Headquarters. She highlighted that the Pandemic Influenza Preparedness Partnership Contribution (PIP-PC) has been catalytic in strengthening national and regional surveillance networks, expanding laboratory capacities, and enhancing operational readiness. She further noted the close integration of influenza preparedness within broader respiratory pathogen surveillance frameworks, reflecting the evolving landscape of global health security.

A detailed assessment of progress under the four outputs of the High-Level Implementation Plan III (HLIP III) was presented.

For Output 1, progress remained mixed. While many countries have excelled in conducting simulation exercises (SimEx), there is a continued need to strengthen Burden-of-Disease (BoD) estimation, update national influenza vaccine policies, and ensure that exercise outcomes are translated into finalised and operationalised preparedness plans.

Output 2 demonstrated the strongest global progress. There have been substantial increases in the reporting of severity indicators following the updated Pandemic Influenza Severity Assessment (PISA) guidance and related capacity-building efforts. Genomic sequencing capacity has expanded, and virus submissions to WHO Collaborating Centres (WHO CCs) have become more systematic, further supported by the establishment of the UNITY Studies Network global task force.

Output 3 showed growing momentum, with an increasing number of Member States conducting routine infodemic monitoring and analysis as part of efforts to strengthen community protection.

Output 4, relating to access to countermeasures, showed limited improvement globally and remains a priority area for the South-East Asia Region (SEAR), where accelerated and targeted efforts are required

Dr Fromme also outlined key operational planning considerations for the 2026–2027 biennium. She noted that 80 countries have been prioritised for Pandemic Influenza Preparedness Partnership Contribution (PIP-PC) support, based on criteria including risk profile, relevance to the Global Influenza Surveillance and Response System (GISRS), implementation capacity, and contribution to global representativeness. The South-East Asia Region (SEAR) has been allocated USD 3.8 million, in addition to dedicated funds for WHO Country Offices to support implementation and delivery.

Planning is aligned with the World Health Organization Global Influenza Strategy 2019–2030, the Health Emergency Preparedness and Response (HEPR) architecture, the International Health Regulations (2005) core capacities, and lessons learned from the COVID-19 pandemic.

Feedback from the Partnership Contribution Independent Technical Expert Mechanism (PCITEM) underscored the critical need for effective collaboration and co-financing between WHO and partners, clear prioritisation of activities, and innovative, streamlined implementation approaches. It also emphasised the importance of closer joint work across output teams and organisational levels. Furthermore, it recommended that GISRS focus on consolidating and strengthening capacities in countries that have already demonstrated progress, rather than expanding support to new countries at this stage. Top of Form Bottom of Form

Dr Fromme outlined several key challenges to the implementation of PIP, including persistent funding gaps, limited human resource capacity, operational and logistical constraints, competing priorities in fragile settings, and declining public trust and demand. She further noted that proposed approaches to address these challenges include diversifying funding sources, promoting increased domestic investment, improving operational efficiencies, fostering cross-country sharing of technical expertise, and strengthening advocacy and risk communication to rebuild public confidence. She also highlighted the importance of adopting hybrid training models to enhance capacity-building efforts.

5.2 New Realities in Managing Influenza and Other Respiratory Pathogen Surveillance: Overall Challenges and Potential Solutions: Dr Pushpa Ranjan Wijesinghe, Programme Area Manager (Infectious Hazard Management), WHE, WHO SEARO

Dr Pushpa Ranjan Wijesinghe presented an overview of the global landscape of pandemic preparedness, with particular emphasis on influenza and respiratory pathogen surveillance. He highlighted that pandemic preparedness continues to be chronically underfunded, especially in low- and middle-income countries, despite clear evidence that investments in preparedness function as global public goods with substantial public health and economic benefits. He noted a persistent global financing gap, estimated at USD 10.5–15 billion annually, which undermines surveillance, preparedness, and response capacities, with disproportionate impacts on vulnerable settings. Dr Wijesinghe also described the recurring “panic-and-neglect” cycle, in which surge funding during emergencies is followed by rapid declines once crises subside, creating a major barrier to the sustainability of preparedness capacities.

Dr Wijesinghe further outlined the implications of recent geopolitical shifts, particularly the reduction of United States supports to several global health mechanisms. He explained that this has created funding gaps affecting WHO-supported programmes and global surveillance systems, including GISRS, with downstream impacts on laboratory operations, virus sharing, genomic sequencing capacity, early warning functions, and broader global coordination platforms. He emphasised that these disruptions increase the risk of delayed outbreak detection and weaken international cooperation, with especially significant consequences for resource-limited settings.

From a regional perspective, Dr Wijesinghe outlined several operational and systemic challenges faced by the WHO South-East Asia Region. These included the financial instability of sentinel surveillance systems, limited domestic financing, and continued heavy reliance on external resources. He highlighted persistent gaps in technical expertise, high turnover among trained laboratory personnel, logistical constraints in specimen transport, and difficulties in accessing conflict-affected or hard-to-reach areas. Dr Wijesinghe further noted inconsistencies in genomic sequencing data submission and delays in integrating surveillance outputs into global data sharing platforms such as RespiMART, which collectively undermine the overall effectiveness of both regional and global respiratory pathogen surveillance efforts.

Dr Wijesinghe outlined a series of potential solutions focused on strengthening country ownership and better integrating surveillance, preparedness, and response functions within national health plans and long-term budgeting processes, in alignment with the PRET framework. He emphasised the importance of optimising sentinel surveillance networks through more representative site selection and adopting minimum essential surveillance to reduce inefficiencies. He further highlighted the need to integrate influenza surveillance within broader respiratory pathogen systems, strengthen laboratory networks, and enhance coordination between the human and animal health sectors. Dr Wijesinghe also underscored the value of exploring regional approaches such as pooled

procurement and shared capacities to address resource constraints. He stressed that sustained progress would require multi-source financing, predictable long-term investments, and strong political commitment to ensure the durability and effectiveness of surveillance and preparedness capacities.

Dr Wijesinghe also presented country case studies from Thailand and Cambodia. Thailand's experience demonstrated a successful transition to a nationally funded influenza surveillance system, supported by digital tools and long-term global collaborations, illustrating a viable pathway toward financial sustainability. Cambodia's experience highlighted the development of a cost-effective surveillance model through optimisation of sentinel sites, use of shared infrastructure, simplified reporting mechanisms, and strong laboratory partnerships, including support from the Institut Pasteur du Cambodge. Together, these case studies demonstrated that high-quality influenza surveillance can be maintained while minimising costs through integrated, targeted, and collaborative approaches.

5.3 Regional Overview of PIP-PC Planning for 2026-2027: Mr Haytham Saber Mohamed, Technical Officer, National Influenza Networks, Infectious Hazard Management (IHM) unit, WHO SEARO

Mr. Haytham Saber Mohamed delivered a virtual presentation providing an overview of the historical and strategic foundations of pandemic preparedness, outlining the Global Influenza Strategy as the key operational framework. He also highlighted the expected outputs and deliverables under HLIP III and presented progress achieved under Outputs 1 and 2 at both regional and country levels

He highlighted that lessons from historical pandemics continue to inform global preparedness efforts, noting that pandemic risk remains persistent across all regions. He emphasised how these lessons have shaped current operational frameworks, particularly the Global Influenza Strategy 2019–2030, which guides Member States in strengthening capacities for influenza preparedness and response. Dr Mohamed then outlined the SEARO Strategic Roadmap on Health Security and Health System Resilience (2023–2027), emphasising its vision to safeguard populations and economies from public health emergencies through whole-of-government and whole-of-society approaches, stronger health security systems, improved surge governance and financing, continuity of essential health services, and enhanced regional collaboration. He also underscored the role of the Pandemic Influenza Preparedness Partnership Contribution (PIP-PC) as a key financing mechanism supporting laboratory systems, surveillance, preparedness planning, and access to countermeasures, noting its proven value during the COVID-19 response.

Mr. Mohamed further outlined the expected outputs of HLIP III. Under Output 1, at the regional level, he reported that SEARO had engaged a dedicated project consultant to strengthen monitoring, documentation, and accountability of PIP-supported activities. He also noted that Annual Regional Progress Reviews had been convened to bring together Member States, WHO, the PIP Secretariat, and partners to review progress, exchange lessons learned and reinforce coordination.

At the country level, he highlighted progress under Deliverable A on burden-of-disease (BoD) estimation, which includes the rollout of the *Burden Averted* tool and the conduct of national workshops in Bangladesh, feasibility assessment of influenza BoD estimation in Sri Lanka, and in DPR Korea. Under Deliverable B on preparedness policies, he described policy workshops in Bangladesh focused on integrating BoD evidence into vaccine policy, the finalisation of India's pandemic plan incorporating lessons from COVID-19, and policy updates in Sri Lanka aligned with the PRET framework.

For Deliverable C on preparedness plans, he reported that national and multisectoral simulation exercises (SimEx), plan validation processes, and contingency planning activities had been implemented across Bhutan, Bangladesh, India, Maldives, Myanmar, and Timor-Leste.

Under Output 2 on collaborative surveillance through GISRS, Dr Mohamed highlighted ongoing regional efforts to strengthen laboratory capacity, sentinel surveillance, virus sharing, and genomic sequencing. He reported that SEARO, through its regional PIP workplan, intends to provide core reagent support to National Influenza Centres (NICs) in Sri Lanka, India, Maldives, and Bhutan to help mitigate critical gaps arising from reduced external support. He further noted that joint NIC reviews continued to be conducted to ensure that laboratories maintain international quality standards and comply with core GISRS requirements.

He outlined country-level activities under Deliverable A on laboratory capacity, which included training initiatives, procurement of essential supplies, support for genomic sequencing, facilitation of virus shipments, and strengthening of biosafety systems across Bangladesh, Bhutan, India, Maldives, Myanmar, Nepal, Sri Lanka, Timor-Leste, and DPR Korea. He further described progress under Deliverable B on research and surveillance within a One Health framework. This included strengthened coordination at the human–animal interface in Bangladesh; integration of Respiratory Syncytial Virus (RSV) surveillance within integrated ILI/SARI surveillance in Bhutan; reactivation of surveillance activities and the Early Warning, Alert and Response System (EWARS) in conflict-affected areas of Myanmar; and strengthened sentinel surveillance in Timor-Leste, including integration of data into RespiMART.

Mr. Mohamed emphasised that regional and country-level implementation of PIP PC under HLIP III has prioritised sustainability, multisectoral collaboration, and the protection of gains achieved under Outputs 1 and 2, while further strengthening resilient surveillance and preparedness systems aligned with global and regional strategic frameworks.

6. Plenary Session II: Monitoring and Evaluation of HLIP III

6.1 Monitoring and Evaluation of HLIP III: Dr Fiona Kee, Technical Officer, PIP Secretariat, WHO Headquarters

Dr Fiona Kee delivered an online session on the Monitoring and Evaluation of HLIP III, outlining the framework and reporting mechanisms that support measurement of progress, accountability, and learning under the PIP-PC. She explained that the HLIP III Monitoring and Evaluation framework functions as an integral component to the implementation plan, ensuring that project inputs translate into the HLIP III outcomes of strengthened PIP through a whole-of-government and whole-of-society approach. She further noted that the framework provides a structured methodology for assessing progress across the four core outputs, thereby facilitating systematic performance tracking and continuous improvement.

She further outlined how progress measurement followed a cascading results logic across country, regional and global levels. Activities generated deliverables, which contributed to Outputs 1 (policy and plans), 2 (collaborative surveillance through GISRS), 3 (community protection) and 4 (access to countermeasures), collectively advancing the HLIP III outcome and longer-term preparedness impact.

Dr Kee also described the role of qualitative reporting through 'stories from the field', noting that these narratives captured multiple activities, demonstrated measurable change through key figures, linked national achievements to global frameworks and illustrated the long-term benefits and impact of PIP-supported investments.

Dr Kee outlined the evaluation components embedded within the framework. She explained that a mid-term review, planned for late 2026, would assess progress across the broader results hierarchy and determine whether adjustments to the design or implementation of HLIP III were required. An end-of-project evaluation, to be conducted externally, would provide accountability for the use of PIP-PC funds and generate recommendations for future preparedness investments. She noted that lessons from the independent HLIP II evaluation and the associated WHO management response had already informed improvements in planning and accountability and that similar learning was expected from HLIP III.

She then reviewed the achievements of SEAR against the targets for 2026–2027. For Output 1, she reported strong performance in multisectoral pandemic preparedness exercises, with the region exceeding its target. However, she highlighted a critical gap in advancing Member States' progress in updating or developing pandemic preparedness plans, including influenza. Under Output 2, she noted achievements in the external quality assessment programme (EQAP) for both seasonal and non-seasonal influenza, as well as strong engagement in global initiatives such as Unity Studies and progress in FluID and FluNet reporting. She emphasised the need to further address inconsistent and untimely reporting by some Member States to FluID and FluNet and highlighted the importance of identifying actions through which SEAR could improve reporting timeliness and completeness.

For Output 3, she reported full participation in the Science Translation Network, alongside persistent gaps in the integration of RCCE components into national preparedness plans. For Output 4, she noted that targets are coordinated at the global level and therefore direct comparison between regional targets and achieved results was not applicable. Nevertheless, she emphasised that further work is required to strengthen engagement in the development of National Deployment and Vaccination Plans (NDVP).

The presentation emphasised that the HLIP III monitoring and evaluation framework played a central role in promoting accountability, informing programme adjustments and supporting data-driven decision-making. She highlighted that the forthcoming mid-term review and final external evaluation would be critical opportunities to recalibrate priorities, address identified gaps and guide the strategic direction of future investments in PIP in the SEAR.

6.2 Impact of Pandemic Influenza Preparedness Partnership Contribution (PIP -PC) Implementation in the WHO South-East Asia Region (SEAR): Dr Ashok Basnet, Consultant- Pandemic Influenza Preparedness, Infectious Hazard management (IHM) Unit, WHO SEARO

Dr Ashok Basnet provided a detailed overview of the PIP Framework and the strategic approaches that guide its implementation across the SEAR. Dr Basnet outlined the regional impact of PIP-PC investments, highlighting that the SEAR has benefited from sustained and predictable support that enabled continued capacity-building for PIP. This support expanded Member State participation in GISRS, thereby enhancing virus detection, genomic sequencing and information-sharing with the WHO's RespiMART. It also strengthened national and regional core capacities for PIP, aligned with the Global Influenza Strategy 2019–2030. He further noted that seasonal influenza programmes were effectively leveraged as a strong foundation for pandemic preparedness and response.

He further described how PIP-PC investments have yielded benefits beyond influenza by reinforcing IHR core capacities and contributing to broader health security outcomes. These investments have enhanced compliance with the International Health Regulations, strengthened health systems to respond effectively to respiratory pathogen pandemics and supported whole-of-society and whole-of-government approaches, fostering coordinated preparedness and response for future health emergencies.

Dr Basnet described significant SEAR achievements, noting that all ten Member States have WHO-recognised NICs and that all ten Member States report to FluNet. Additionally, all ten Member States have national influenza pandemic preparedness plans, with nine of them updated following the WHO Pandemic Influenza Risk Management (PIRM) guidance. High participation rates were seen in the WHO EQAP, where nine out of ten Member States participate and achieve a 100% score, and nine out of ten are also shipping influenza viruses. Furthermore, eight out of ten Member States are reporting data to FluID, and three of the ten have successfully published Body estimates.

He provided an illustrative overview of key regional and country achievements. In SEAR, accomplishments include advancing influenza preparedness and severity assessment through the PISA approach, conducting joint national and international reviews of ILI and SARI sentinel surveillance in Indonesia, and strengthening overall influenza surveillance and preparedness. WHO SEARO hosted a high-level webinar in response to rising H5 threats and conducted an information-sharing session to enhance specimen management for influenza surveillance. The Unity Studies Network in SEAR comprises the National Public Health Laboratory in Nepal, IEDCR in Bangladesh, the All-India Institute of Medical Sciences in Delhi, the Hamdard Institute of Medical Sciences and Research in India, Jayewardene University in Sri Lanka, and Prince of Songkhla University in Thailand.

Dr Basnet further highlighted several country achievements that illustrate progress across the Region. These included a series of capacity-building activities, such as the participation of the Democratic People's Republic of Korea in a two-day virtual workshop supported by PRET secretariat of the WHO headquarters and a workshop in Nepal aimed at strengthening the safe shipment of infectious substances.

In Myanmar, an Early Warning Alert and Response System was implemented as a supplementary surveillance mechanism in conflict-affected areas. In Timor-Leste, the National Influenza Centre (NIC) achieved WHO recognition, while Sri Lanka demonstrated a reduction in the burden of seasonal influenza through the effective use of antivirals. Bhutan strengthened pandemic influenza preparedness through training and simulation exercises (SimExs) supported by the Pandemic Influenza Preparedness Partnership Contribution (PIP-PC).

In India, the content framework for the National Pandemic Preparedness Plan for Respiratory Viruses of pandemic potential was finalized through a national consultation. The country also hosted an international workshop on influenza virus and respiratory syncytial virus (RSV) genome sequencing in Pune. In addition, the Maldives established an Integrated Public Health Information System based on the DHIS2 platform.

Nepal piloted an innovative risk assessment tool, the Zoonotic Influenza Distribution and Ranking (ZIDAR) system. Feasibility assessments to estimate the burden of influenza were conducted in Sri Lanka, while Thailand's NIC received training on antiviral resistance testing at the WHO Collaborating Centre at Melbourne, Australia.

Dr Basnet emphasised the importance of ensuring the sustainability of programme impacts. He highlighted several key considerations for sustaining these gains, including leveraging investments and capacities developed during the COVID-19 pandemic and previous High-Level Implementation Plans (HLIPs), strengthening coordination with partners and funding mechanisms, and transforming common implementation challenges encountered by Member States into opportunities for shared learning and best practices across the Region.

7. Plenary Session III: Review of HLIP III Implementation and Outputs in SEAR Member States

This session focused on country updates on the progress of implementation, significant outcomes achieved under the Pandemic Influenza Preparedness (PIP) Framework, key challenges encountered during 2024–2025, and priority areas and planned actions for addressing these challenges during the 2026–2027 biennium.

7.1 Bhutan: Mr Kunzang Dorji, Deputy Chief Laboratory Officer and Head of the National Influenza Centre, Royal Centre for Disease Control, Bhutan

Mr Kunzang Dorji presented an update on the implementation of HLIP III in Bhutan. He reported that the Department of Public Health had strengthened pandemic influenza preparedness through the revision of standard operating procedures (SOPs) covering activation of the Health Emergency Operations Centre, outbreak investigation, specimen collection and testing, infection prevention and control, quarantine and isolation, deployment of human resources, management of emergency medical supplies, and handling of deceased persons. These revisions incorporated lessons learned from recent public health events and have helped to standardise preparedness and response processes across the health system.

He further noted that Bhutan has implemented annual seasonal influenza vaccination since 2019, procuring approximately 100 000 vaccine doses each year through joint financing from the Bhutan Health Trust Fund and the International Vaccine Institute (IVI). IVI supports the vaccination of health workers and pregnant women, while domestic resources are used to vaccinate other high-risk groups. Seasonal influenza vaccination campaigns are conducted annually from October to December. Ongoing research, including a knowledge, attitudes and practices (KAP) study among health professionals, is expected to inform strategies to improve vaccine uptake and strengthen risk communication.

He further reported that, during 2024–2025, the National Influenza Centre (NIC) developed the National Respiratory Virus Sentinel Surveillance Guideline, incorporating respiratory syncytial virus (RSV) surveillance into existing surveillance systems. The NIC also conducted training for clinicians, nurses and laboratory personnel on severe acute respiratory infection (SARI) and influenza-like illness (ILI) surveillance, as well as RT-PCR testing for respiratory virus detection. In addition, supervisory visits were undertaken at sentinel surveillance sites to strengthen implementation and monitoring. Bhutan also shipped clinical specimens to WHO Collaborating Centres (WHO CCs) at the United States Centers for Disease Control and Prevention (US CDC) and procured essential laboratory reagents and supplies to support surveillance and diagnostic activities.

Mr Dorji highlighted several challenges, including shortages and high turnover of human resources at sentinel surveillance sites, inconsistent availability of laboratory reagents due to reduced allocations and delays in supply, constraints related to specimen

shipment, and difficulties in maintaining and calibrating laboratory equipment. Simulation exercises also identified gaps in the clarification of roles and responsibilities, risk communication, triage capacity, infrastructure, and infection prevention and control (IPC) measures.

Looking ahead to the 2026–2027 biennium, he noted that Bhutan plans to conduct simulation exercises using a One Health approach, expand training across key surveillance domains, strengthen outbreak preparedness and response coordination, and further enhance laboratory capacity to support respiratory virus surveillance and pandemic preparedness.

7.2 India: Dr Sanket Kulkarni, Joint Director, IDSP Division, National Centre for Disease Control (NCDC), Ministry of Health and Family Welfare, New Delhi, India

Dr Sanket Kulkarni reported that India had made substantial progress across all three outputs of the Pandemic Influenza Preparedness (PIP) Framework. Under Output 1, the country finalized the National Pandemic Preparedness Plan for Respiratory Viruses and disseminated it to all States and Union Territories. India also continued to update its contingency plans regularly, including those for avian influenza preparedness and response.

He noted that India has transitioned to a fully digital, near real-time, geographically referenced surveillance system through the Integrated Health Information Platform (IHIP). The platform supports case-based reporting, enhanced data analytics, regular monitoring and feedback mechanisms, and capacity-building activities at national and subnational levels. These advancements have strengthened the timeliness, quality and use of surveillance data for public health decision-making and response.

He further noted that, under Output 2, the National Influenza Centre (NIC) at the National Institute of Virology (NIV), Pune, leads laboratory and surveillance activities, supported by a network of more than 160 Viral Research and Diagnostic Laboratories (VRDLs), sentinel laboratories, and state-recognized laboratories. India's One Health approach brings together laboratory networks across multiple ministries to strengthen surveillance of zoonotic and other respiratory pathogens. Regular sharing of surveillance and laboratory data with WHO and influenza virus sharing with WHO Collaborating Centres further enhances early warning, risk assessment, and rapid response capacities at national, regional, and global levels.

Dr Kulkarni further highlighted that, under Output 3, significant advancements have been made in strengthening community protection and preparedness. These include the incorporation of a community reporting module within the Integrated Health Information Platform (IHIP) and the enhancement of the Media Scanning and Verification Cell through the use of artificial intelligence to detect and monitor more than 120 health conditions across the human, animal, and environmental sectors. He also noted that India conducted a large-scale simulation exercise (SimEx) involving both health and non-health sectors, the findings of which informed updates to national avian influenza contingency plans and

strengthened multisectoral coordination and preparedness. These efforts are aligned with the WHO Preparedness and Resilience for Emerging Threats (PRET) framework, further enhancing the country's capacity to prevent, detect, and respond to emerging public health threats.

Dr Kulkarni highlighted that key challenges remain in sustaining and further strengthening pandemic preparedness capacities across the country. These include the need for continuous capacity building at district and sub-district levels, addressing high staff turnover, enhancing early notification and reporting mechanisms, sustaining the genome sequencing capacity established during the COVID-19 pandemic, and expanding environmental surveillance systems, including wastewater monitoring. He noted that India seeks continued technical and strategic support from WHO SEARO and the Pandemic Influenza Preparedness (PIP) Secretariat to facilitate the integration of preparedness tools into national systems, support the development of forecasting and predictive models, and promote regional knowledge exchange and collaboration. Despite these challenges, he emphasized that substantial progress has been achieved, including major upgrades to the national surveillance platform, training of more than 700 surveillance officers and laboratory personnel, and significant strengthening of early warning and response capacities. These accomplishments represent important milestones in fulfilling India's commitments under the PIP Partnership Contribution framework and enhancing national and regional health security.

7.3 Maldives: Ms Fathimath Ana, Public Health Coordinator, Health Protection Agency, Ministry of Health, Maldives

Ms Fathimath Ana presented that Maldives has made significant progress in strengthening surveillance and data management for respiratory pathogens through targeted capacity-building initiatives and system enhancements. Training on FluID, FluMart, and related surveillance platforms was provided to health facility staff in Malé and newly recruited PIP project personnel, improving the quality and timeliness of real-time reporting to WHO global surveillance systems and facilitating greater integration with the national DHIS2 platform. She further noted that a National Influenza Centre (NIC) review mission conducted by WHO SEARO in 2025 provided valuable technical guidance on biosafety and biosecurity practices, laboratory performance, quality management, and data management systems. In addition, decentralized training on DHIS2-based influenza surveillance, including pilot implementation in Raa Atoll, has strengthened subnational surveillance capacities and expanded reporting capabilities beyond the capital, contributing to more timely detection and monitoring of respiratory disease trends across the country.

Ms Ana described several key achievements in laboratory strengthening under the PIP project. These included an exposure visit to the National Institute of Virology (NIV), Pune, for laboratory staff from the Indira Gandhi Memorial Hospital, which enhanced competencies in biosafety and biosecurity practices, equipment calibration and maintenance, quality assurance, and PCR diagnostic workflows. Additional capacity-building activities on biosafety, biosecurity, and the international shipment of infectious

substances further strengthened national laboratory preparedness and ensured closer alignment with international standards and regulatory requirements. As a result, laboratory personnel are now better equipped to safely and efficiently manage diagnostic workflows and respond to respiratory disease outbreaks and other public health emergencies.

She further highlighted Maldives' progress in strengthening preparedness planning and resource mobilization. Key achievements included the procurement of Universal Transport Medium (UTM) and triple-packaging materials to support specimen collection and transport, the revision of the National Influenza Surveillance and Treatment Guideline in line with WHO recommendations, and the updating of Hospital Emergency Response Plans in two atolls to address a range of multi-hazard emergency scenarios. In addition, sensitization and awareness sessions reached more than 250 healthcare workers and support staff, improving understanding of emergency preparedness and response procedures. Simulation exercises (SimExs) were also conducted to test and validate emergency plans, resulting in improved coordination and communication among health facilities, emergency response teams, and subnational authorities, thereby strengthening overall preparedness and response capacity.

Ms Ana further noted that significant progress has been made in strengthening preparedness and response capacities at the atoll level through targeted capacity-building initiatives for Health Emergency Operations Centres (HEOCs) and hospital emergency response teams. These efforts have enhanced local readiness to manage public health emergencies and facilitated more effective coordination across the health system. She highlighted improvements in National Influenza Centre (NIC) biosafety and biosecurity practices, surveillance data quality, and the integration of the WHO Preparedness and Resilience for Emerging Threats (PRET) principles into national preparedness and response systems. In addition, more than 100 health professionals have been trained in key areas, including risk assessment, emergency coordination, logistics, and incident management, thereby strengthening the national public health workforce. Functional HEOCs, strengthened emergency response mechanisms, and enhanced laboratory and surveillance systems collectively demonstrate substantial progress toward a whole-of-system approach to pandemic preparedness. Ms Ana reaffirmed Maldives' commitment to sustaining these gains and continuously refining its pandemic preparedness and readiness capacities in line with the PRET framework and national health security priorities.

7.4 Sri Lanka: Dr Nimal Gamagedara, Consultant Epidemiologist, Epidemiology Unit, Ministry of Health, Sri Lanka

Dr Nimal Gamagedara presented Sri Lanka's influenza surveillance system, which is implemented through a coordinated, One Health approach that integrates epidemiological surveillance of influenza-like illness (ILI) and severe acute respiratory infections (SARI), laboratory surveillance conducted by the National Influenza Centre (NIC) at the Medical Research Institute, and animal influenza surveillance implemented by the Department of Animal Production and Health. Data generated through sentinel surveillance sites provide critical information on disease trends and seasonality, while the Quarterly Avian Influenza Technical Expert Committee meetings serve as a platform for multisectoral review, information sharing, and decision-making.

He highlighted that, under the PIP-PC, Sri Lanka has strengthened influenza surveillance capacities and national coordination mechanisms. He further noted that key challenges include limited laboratory capacity, delays in data integration, constrained resources for the expansion of sentinel surveillance sites, and the need to improve data use for vaccination and other public health interventions. Addressing these challenges will require strengthened reporting mechanisms, enhanced cross-sectoral coordination, and sustained investment in human resources and technological infrastructure, which remain key priorities.

Dr Gamagedara outlined the key priority areas for the upcoming planning cycle, including a comprehensive gap assessment of the National Respiratory Pathogen Pandemic Preparedness Plan, scheduled to commence in early 2026; the estimation of the influenza burden of disease (BoD) to inform evidence-based vaccination policies and recommendations; and the presentation of findings to relevant advisory committees for policy review and consideration. The findings from these activities are expected to inform future vaccination strategies and strengthen pandemic preparedness planning.

He further noted that Sri Lanka aims to strengthen the integration of human, animal, and environmental health data at the national level; enhance laboratory connectivity; ensure timely and consistent reporting from sentinel surveillance sites; and strengthen national coordination mechanisms to support the early detection of and response to respiratory threats. Continued support from WHO and partners, capacity-building for subnational staff, and technical enhancements to the National Influenza Centre (NIC) were identified as critical to sustaining progress. The country reaffirmed its commitment to strengthening preparedness and resilience against emerging and re-emerging respiratory pathogens.

8. Plenary Session IV: Best Practices Sharing by Invited Technical/Academic Experts/ Groups/Centres Mobilized by SEARO

8.1 Strengthening Preparedness through Seasonal Influenza Vaccination: Lessons and Momentum from SEARO: Dr Rania Attia, Consultant, Infectious Hazards Management Unit, WHO SEARO

Dr Rania Attia delivered a virtual presentation highlighting the substantial global burden of seasonal influenza, particularly among high-risk groups, and emphasized that seasonal influenza vaccination is critical for maintaining immunization delivery platforms and strengthening health system readiness for future pandemics. She highlighted the importance of influenza prevention in the WHO South-East Asia Region, given its demographic diversity, population mobility, and human-animal-environment interfaces. She noted the important contributions of the PIP Framework and the HLIP in strengthening policy frameworks, surveillance and data systems, and programme implementation.

She described several regional strengths, including established influenza-like illness and severe acute respiratory infection surveillance systems; a network of National Influenza Centres ; strong connectivity with the Global Influenza Surveillance and Response System; infrastructure established through investments made during the COVID-19 pandemic that can be leveraged to support seasonal influenza vaccination programmes; pilot programmes in several Member States that have generated valuable operational lessons for broader implementation and national scale-up; and a coordinated partner ecosystem involving WHO, CDC, the PIVI, UNICEF, and Gavi.

Dr Attia outlined ongoing challenges, including financial constraints, competing health priorities, and low adult vaccination demand driven by limited risk perception. She identified operational challenges related to workforce training, cold chain capacity, and last-mile delivery, and emphasized the need for clear communication strategies informed by behavioural and social insights to improve vaccine acceptance among priority populations. She further highlighted the importance of domestic financing plans, the integration of influenza vaccination within primary health care (PHC) and universal health coverage (UHC) frameworks, and strengthened routine monitoring of vaccination coverage, adverse events following immunization (AEFI), and programme impact to ensure sustainability.

She further highlighted regional achievements, including the development of training guidelines, new technical tools and resources, updates to national guidelines, and the increased use of evidence to inform policy deliberations and decision-making. She noted improvements in cross-programme collaboration and the leveraging of logistics and systems established during the COVID-19 pandemic to support seasonal influenza vaccination programmes and emphasized that effective advocacy requires a strong evidence base and early engagement with ministries of finance. She encouraged continued regional peer-to-peer exchange and highlighted the High-Level Implementation Plan III (HLIP III) as an opportunity to accelerate progress. In concluding, she noted that seasonal influenza vaccination contributes to stronger health systems, increased public trust, and enhanced resilience, while serving as an important component of pandemic preparedness.

8.2 Analysis of WHO FluNet and FluID Influenza Surveillance Data for SEAR 2015-2023: Dr Archisman Mohapatra, Executive Director, GRID Council, New Delhi, India

Dr Archisman Mohapatra delivered a virtual presentation on the analysis of FluNet and FluID influenza data for the WHO SEAR between 2015 and 2023. He highlighted the Region's increased vulnerability to influenza and other respiratory pathogens due to high population density and ecological factors and noted that, despite disruptions caused by the COVID-19 pandemic, surveillance systems have continued to be strengthened. He further noted that variations in surveillance capacity and reporting across countries necessitate cautious interpretation of the data. Against this backdrop, WHO SEARO undertook an analysis to characterize regional and national virological and epidemiological patterns of influenza using FluNet and FluID data.

He explained that the analysis was based on RespiMART data, with FluNet providing virological trends and FluID providing epidemiological indicators for ILI) and SARI. Data were analysed across countries, hemispheres, and influenza transmission zones. Most Member States in the WHO South-East Asia Region reported complete datasets; however, reporting commenced later in Myanmar, Timor-Leste, and the Democratic People's Republic of Korea. In addition, SARI mortality data from DPRK and Timor-Leste were excluded from the analysis due to data limitations.

Dr Mohapatra presented findings from the analysis, which showed that between 2015 and 2023, approximately 600 000 respiratory specimens were processed, with influenza A viruses accounting for the majority of detections. Influenza A(H1N1) pdm09 was the predominant subtype prior to 2019, while influenza A(H3) predominated after 2020. This was accompanied by a shift in the predominant influenza B lineage from B(Yamagata) to B(Victoria). Analysis by hemisphere demonstrated that the Northern Hemisphere was predominantly affected by influenza A(H1N1) pdm09, whereas influenza A(H3) predominated in the Southern Hemisphere.

He further reported that country-level analyses demonstrated a peak in influenza activity in 2019, followed by a marked decline in 2020, likely reflecting the impact of the COVID-19 pandemic and related public health measures. The analysis also showed continued variability in circulating influenza subtypes and an increasing proportion of influenza B(Victoria) detections over time. Seasonal patterns indicated year-round influenza circulation across the Region, with two annual peaks observed in monsoon-influenced countries and a single peak during winter or spring in smaller island and high-altitude countries. Across influenza transmission zones (ITZs), influenza A viruses remained predominant, with influenza A(H3) predominating in the South-East Asia ITZ and influenza A(H1N1) pdm09 predominating in the South Asia ITZ. A decline in influenza positivity rates was also observed following 2020.

Dr Mohapatra reported that the analysis concluded that FluID data were characterized by variability in reporting across countries, with the majority of ILI cases reported by Thailand and the majority of SARI cases reported by Bangladesh and Nepal. Following 2020, reported ILI activity declined, whereas SARI cases increased, with higher proportions observed in the Northern Hemisphere and the South Asia influenza transmission zone (ITZ). SARI case-fatality rates showed a steady decline after 2017. Key limitations included inconsistencies in data quality, reporting completeness, and data granularity, highlighting the need for strengthened sentinel surveillance systems and Mosaic surveillance platform aligned with the Global Influenza Strategy 2019-2030, the Pandemic Influenza Preparedness (PIP) High-Level Implementation Plan III (HLIP III), the PIP Partnership Contribution (PIP-PC), and the Preparedness and Resilience for Emerging Threats (PRET) Initiative.

With these two virtual presentations, Plenary Session IV of Day 1 concluded. The Chair and Co-Chair thanked the presenters for their informative presentations and the participants for their active engagement and contributions. The agenda and key activities for Day 2 were subsequently presented to the participants.

Day 2: 28 October 2025

At the beginning of Day 2, the Rapporteur, Prof Nuwan Wickramasinghe, provided a recap of the proceedings and key outcomes of Day 1. He summarized the main presentations and highlighted key discussion points and recommendations emerging from the sessions. The recap helped reinforce participants' understanding of the issues discussed, ensured continuity between the two days of the meeting, and provided context for the discussions and activities scheduled for Day 2.

9. Plenary Session V: Review of the Implementation of Non-Country-Based Workplans in SEAR

9.1 Output 4 A: Regulatory Readiness Global Overview, Updates on Specific Work in SEAR in 2025 and the Plan for Next Biennium: Dr Razieh Ostad Ali Dehaghi, Scientist, Regulation and Prequalification (RPQ) Department, WHO Headquarters, Geneva, Switzerland

Dr Razieh Ostad Ali Dehaghi delivered a virtual presentation providing an overview of global and regional progress in strengthening regulatory readiness under the Pandemic Influenza Preparedness Partnership Contribution (PIP-PC). She highlighted the 2024-2025 biennial workplan for the WHO South-East Asia Region, which focuses on strengthening national regulatory systems for medical products, including diagnostics, vaccines, and other pandemic influenza-related medical countermeasures. A key milestone was the introduction of the WHO Global Benchmarking Tool Plus Medical Devices (GBT+MD), which enables the systematic assessment of regulatory maturity, identification of gaps, and alignment of institutional development plans with international standards. She also highlighted WHO guidance on regulatory preparedness for emergency-use vaccines, which has been translated into all six official United Nations languages to facilitate accessibility and promote consistent implementation and interpretation across countries.

Dr Dehaghi further reported that regional capacity-building efforts included training on Good Manufacturing Practices for 63 participants in 2024, a regulatory preparedness workshop conducted in 2025, and specialized training on regulatory performance indicators for 12 national regulatory officials. Practical capacity-building was further strengthened through the WHO-SwissMedic partnership, which provided hands-on training in regulatory assessment methodologies for 19 regulatory staff from the South-East Asia Region. She further highlighted notable achievements, including India attaining WHO maturity level 3 in 2024; follow-up benchmarking assessments in Bangladesh, Bhutan, Maldives, and Timor-Leste; and Thailand completing an assisted self-benchmarking exercise in mid-2025. These activities were complemented by regular virtual follow-up engagements with Member States to support continuous improvement efforts. Collectively, these achievements demonstrate the Region's commitment to strengthening regulatory systems, advancing regulatory maturity, and ensuring access to quality-assured medical products during public health emergencies.

Dr Dehaghi highlighted that planned activities for 2026-2027 will build on the progress achieved through formal benchmarking, assisted benchmarking, follow-up missions, and targeted technical assistance to support the implementation of institutional development plans. National regulatory authorities will receive both remote and in-country technical support to strengthen quality management systems and address identified regulatory gaps. Regional capacity-building workshops on Good Regulatory Practices and Regulatory Performance Indicators will facilitate the adoption of WHO guidance and the integration of good governance principles into regulatory systems. A major deliverable will be the finalization of the WHO Guidance on Regulatory Performance Indicators, which will provide a harmonized framework for monitoring and assessing regulatory system performance.

Dr Dehaghi remarked that regulatory readiness is a critical component of pandemic preparedness and response, enabling timely and equitable access to safe, effective, and quality-assured medical products. She highlighted that sustained investment in workforce capacity development, regional benchmarking, information-sharing, and collaboration across the WHO South-East Asia Region (SEAR) will support greater convergence of regulatory practices, strengthened reliance mechanisms, and the development of resilient health systems aligned with global guidance.

9.2 Output 4 A: Regulatory Readiness Regional Overview, Updates on Specific Work in South-East Asia Regulatory Network (SEARN): Dr Adrien Inoubli, Regional Adviser (Medical Products Quality and Regulation), Department of Health Systems (HSD), WHO SEARO

Continuing with Dr Dehaghi's presentation, Dr Adrien Inoubli presented an overview of the South-East Asia Regulatory Network (SEARN) and its role in strengthening regulatory preparedness for public health emergencies in the Region. SEARN, established in 2016, is a voluntary network of National Regulatory Authorities (NRA) from 10 Member States of the WHO South-East Asia Region, aimed at promoting information-sharing, collaboration, and regulatory convergence. He further noted that, supported by high-level political commitment, including the Delhi Declaration adopted in 2018, SEARN serves as a critical platform for harmonizing regulatory approaches, strengthening collaboration among NRAs, and facilitating timely regulatory decision-making during public health emergencies.

Dr Inoubli outlined the operationalization of the SEARN regulatory preparedness strategy, which was further structured and strengthened in 2024. The strategy provides a mechanism through which SEARN members coordinate with their International Health Regulations (IHR) National Focal Points to determine the need for a coordinated regulatory response when events of potential international public health concern arise. More than 50 sources of regulatory intelligence have been mapped, and standardized communication templates have been developed to facilitate information exchange and coordinated action. Emergency criteria were further refined to guide activation of SEARN, including multi-country outbreaks, events with the potential for international spread, and

the dissemination of misleading or false information related to medical products. Collectively, these measures have strengthened the Region's capacity to respond rapidly and coherently to emerging public health threats.

He reported that the 2024 mpox outbreak served as a practical test of SEARN's emergency response mechanism. An ad hoc working group comprising representatives of National Regulatory Authorities (NRAs), supported by WHO experts and partners, convened a series of meetings and conducted an intra-action review to assess regulatory authorization procedures, the availability of medical countermeasures, regulatory collaboration mechanisms, and their integration into national and regional preparedness plans. The SEARN Assembly adopted the review's recommendations in July 2025, which identified priority areas for improvement, including clarification of regulatory pathways during public health emergencies, strengthening of reliance mechanisms, and ensuring timely access to medical countermeasures.

Dr Inoubli emphasized that the findings of the review provide strategic direction for the further development of SEARN, including the establishment of clearer definitions and operational approaches for regulatory preparedness, readiness, and response; the use of reliance mechanisms to accelerate access to medical products; enhanced intra-regional information-sharing; support for the transition from emergency-use authorizations to full marketing authorizations; and strengthened oversight of clinical trials. He further noted that SEARN has evolved into a coordinated regional regulatory platform for public health emergencies and that sustained investment in regulatory capacity, collaboration, and information exchange will be critical to maintaining preparedness and ensuring timely and equitable access to medical countermeasures across the Region.

10. Plenary Session III: Review of Implementation of HLIP-III Outputs in SEAR Member States

Following the presentations in Plenary Session V, the meeting continued with country updates, building on the discussions initiated during Plenary Session III. Country representatives presented progress in the implementation PIP-PC activities, key achievements and outcomes during the 2024-2025 biennium, and challenges encountered during implementation. The session also provided an overview of priority focus areas and planned actions for the 2026-2027 biennium aimed at addressing identified gaps and strengthening pandemic preparedness capacities.

10.1 Bangladesh: Prof Tahmina Shirin, Director, Institute of Epidemiology, Disease Control and Research (IEDCR), Ministry of Health and Family Welfare, Bangladesh

Prof Tahmina Shirin highlighted online that Bangladesh has adapted the National Pandemic Preparedness and Response Plan for Respiratory Pathogens (2026–2030) in accordance with WHO PRET guidelines, with draft finalisation and dissemination underway. Prof Shirin emphasised the multisectoral workshops and stakeholder engagement conducted to finalise the plan, which aims to minimise transmission,

morbidity, mortality, and the socioeconomic impacts of respiratory pathogen pandemics. The plan also seeks to enable timely action for emergency coordination, collaborative surveillance, clinical care, community protection, and equitable access to countermeasures. She further noted that the integration of SARS-CoV-2 and RSV surveillance into the national influenza platform enhances the country's overall readiness for seasonal and pandemic influenza.

Under HLIP III Output 2, Prof Shirin reported progress in collaborative surveillance through GISRS, supported by strengthened laboratory capacities, including genomics and molecular diagnostics. Bangladesh operates two national influenza surveillance platforms, covering 10 tertiary hospitals and nine district hospitals, to monitor circulating influenza strains, determine seasonality, and detect the early emergence of novel strains. Laboratory capacities at the NIC, including BSL-2 facilities and genomic sequencing, support the detection of influenza A and B, RSV, SARS-CoV-2, and other respiratory pathogens. Routine participation in the EQAP and timely reporting to GISRS ensure adherence to international standards. Prof Shirin noted that PISA activities and multi-source collaborative surveillance have been implemented to enhance preparedness and data-driven response planning.

Looking ahead, Prof Shirin outlined plans to finalise the National Pandemic Preparedness and Response Plan and continue current influenza surveillance activities. The country will continue PISA reporting, strengthen multisource collaborative surveillance, and conduct annual dissemination of surveillance data among human and animal health managers. She highlighted that key achievements include the integration of SARS-CoV-2 and RSV surveillance, enhanced genomic sequencing capacity, and the application of PRET guidelines in national planning. These efforts aim to ensure resilient, equitable, and comprehensive preparedness for influenza and other respiratory pathogens with pandemic potential.

10.2 Democratic People's Republic of Korea: Ms Anupurba Roy Chowdhury, Technical Officer (Laboratory Specialist), WHO Country Office, DPR Korea

Ms Anupurba Roy Choudhary provided an update on DPR Korea's ongoing implementation of PIP activities. She noted that routine influenza surveillance continues through sentinel sites, supported by national laboratory testing, with monthly reports submitted to RespiMart. The National Influenza Pandemic Preparedness Plan has been updated to integrate respiratory pathogens and address gaps identified through recent simulation exercises (SimExs). Orientation workshops were conducted to strengthen the capacities of SimEx trainers of training, thereby enhancing the effectiveness of SimEX preparedness activities at the national level. They conducted the sub-national SimExs. These SimExs conducted at central and provincial levels provided feedback that was systematically incorporated into the updated plan. Quarterly monitoring of the National Influenza Centre (NIC) by the National Programme Office ensures compliance with operational standards. Workshops and training sessions have continued to strengthen pandemic influenza severity assessment and improve NIC and sentinel surveillance

systems. She added that cascade training at national and provincial levels focused on biosafety and laboratory testing, while the procurement of essential laboratory supplies supported uninterrupted operations of surveillance. The annual review process identified gaps in implementation and outlined strategies to strengthen preparedness and response.

She highlighted significant outcomes under the PIP-PC investments, including strengthened policy and planning through the updated National Influenza Pandemic Preparedness Plan, enhanced coordination among surveillance, laboratory, and outbreak/pandemic response teams, and improved pandemic severity assessment capabilities. Laboratory capacity and resilient surveillance systems were maintained and strengthened through the implementation of activities related to collaborative surveillance under the PIP work plan (Output 2). The NIC continued to effectively use WHO-recommended PCR methods, and monthly data reporting contributed to influenza monitoring and risk assessment. National and provincial cascade training enhanced technical capacity, and improved performance of the NIC and sentinel surveillance systems supported broader pandemic response readiness.

Ms Choudhary noted challenges in 2024–2025, including delays in the implementation of direct financial contributions due to limited cash flow, the remote provision of international technical support, delays in the procurement of reagents and supplies, limited participation in the External Quality Assessment Programme (EQAP), and constrained virus-sharing activities. She highlighted that plans for 2026–2027 include strengthening programme implementation through improved financial utilisation, enhanced coordination, hybrid technical mentoring, regional procurement planning, reinforcement of laboratory quality and biosafety, strengthened coordination with WHO and reference laboratories, and continued needs assessments and stakeholder consultations to prioritise interventions.

10.3 Myanmar: Dr Mya Yee Mon, National Professional Officer, Disease Surveillance and Epidemiology, WHE, WHO Myanmar

Dr Mya Yee Mon provided an update on Myanmar's implementation of PIP activities, summarising programme progress, key outcomes, challenges in 2024-2025, and plans for 2026-2027. She reported that resilient surveillance systems, including ILI/SARI sentinel sites and EWARS, have been maintained to enhance the early detection of influenza and other epidemic-prone diseases. Technical support from WHO, including laboratory supplies and human resources, has strengthened genomic sequencing capacity and ensured the timely sharing of virus samples with WHO CCs. Dr Mon highlighted that improvements in laboratory-based surveillance and data management have supported early detection and an effective pandemic response, despite operational constraints.

Dr Mon highlighted several challenges during 2024-2025, including logistical disruptions affecting the transport of specimens, limited resources at sentinel surveillance sites and the National Influenza Centre (NIC), and delays in the importation of laboratory supplies. These constraints adversely affected the timeliness, sensitivity, and consistency of influenza surveillance and reporting. As a result, the efficiency of influenza virus

detection was reduced, limiting contributions to the Global Influenza Surveillance and Response System (GISRS). Dr Mon also noted challenges in sustaining high-quality surveillance due to funding limitations and the lack of in-country international technical support.

Looking ahead to 2026-2027, Dr Mon outlined plans to strengthen technical support to the National Influenza Centre (NIC) and the central epidemiology unit, update and operationally test the National Influenza Preparedness Plan, and enhance laboratory-based surveillance for influenza-like illness (ILI), severe acute respiratory infection (SARI), and genomic surveillance. Efforts will continue to integrate surveillance for COVID-19 and other respiratory pathogens into existing platforms, while further strengthening capacities for outbreak investigation, zoonotic influenza preparedness and response through a One Health approach, and virus sharing in accordance with International Health Regulations (IHR) mechanisms. Dr Mon noted that these measures are expected to improve coordination, strengthen laboratory quality and performance, and enhance national preparedness for respiratory disease outbreaks and future pandemics.

10.4 Nepal: Ms Lilee Shrestha, National Public Health Laboratory, Ministry of Health and Population, Nepal

Ms Lilee Shrestha delivered an online presentation on Nepal's implementation of PIP Framework activities, highlighting key achievements, challenges, and priorities for 2026-2027. She reported that the NIC, operating within the National Influenza Surveillance Network, conducts molecular testing for SARS-CoV-2, influenza viruses, and RSV including genomic sequencing. The NIC also supports surveillance through supervision, capacity strengthening, quality assurance, data reporting, and virus sharing with WHO Collaborating Centres. She noted that the integrated surveillance system comprises 15 sentinel sites and eight laboratories, facilitating comprehensive virological surveillance, early detection of influenza-like illness and severe acute respiratory infection cases, and contributions to the selection of candidate vaccine viruses. Timely sharing of surveillance data through RespiMart and national information platforms supports local, national, regional, and global monitoring and reporting.

She described quality assurance measures, including standardised SOPs, refresher training, national and international proficiency testing, and ISO-compliant biosafety cabinet calibration. Genomic sequencing has expanded, with over 2,800 SARS-CoV-2 and 62 influenza samples processed, enhancing preparedness for emerging pathogens. She further added that biannual virus sharing supports vaccine selection and collaboration with WHO CCs. Integration of influenza and RSV surveillance strengthens a sustainable and resilient respiratory pathogen monitoring

Ms Shrestha highlighted several challenges encountered during 2024-2025, including irregular specimen collection, limited human resources, shortages of laboratory reagents and consumables, the need for equipment calibration and maintenance, and budgetary constraints. To address these challenges, measures were implemented to strengthen workforce capacity through training and orientation workshops, reinforce the

use of standard operating procedures (SOPs), enhance advocacy efforts, and build the capacity of biomedical engineers and laboratory technicians. She emphasized the importance of maintaining operational continuity and technical quality across National Influenza Surveillance Network sentinel sites and provincial laboratories. Ongoing support from WHO Country Office-Nepal, the WHO Regional Office for South-East Asia, and the PIP Secretariat has been instrumental in providing technical assistance, facilitating knowledge and skills exchange, and mobilizing financial resources to sustain surveillance and laboratory activities.

Ms Shrestha highlighted Nepal's priorities for 2026-2027, which include expanding One Health approaches, strengthening estimates of the burden of influenza, enhancing genomic sequencing and bioinformatics capacities, advancing national laboratory accreditation, and operationalizing updated preparedness and response plans under the human-animal interface framework. Continued stakeholder engagement, workforce capacity strengthening, and simulation exercises (SimExs) will further reinforce preparedness and response capacities for respiratory pathogen threats. She noted that the integrated surveillance network, strengthened laboratory systems, and robust quality assurance mechanisms provide a strong foundation for enhancing pandemic preparedness and response, while supporting Nepal's continued contributions to the GISRS at regional and global levels.

10.5 Timor-Leste: Ms Lucia Ximenes, Surveillance and Epidemiology Department, Ministry of Health, Timor-Leste

Ms Lucia Ximenes presented the progress of PIP Framework implementation in Timor-Leste, highlighting key achievements, challenges, and priorities for the coming years. She reported that the country has established an integrated influenza and SARS-CoV-2 surveillance system, supported by strengthened laboratory capacity, improved data management, and enhanced human resource capabilities. Ms Ximenes emphasized that investments made through the PIP-supported influenza programme provided a critical foundation for Timor-Leste's response to the COVID-19 pandemic, including the establishment and expansion of PCR testing capacity, operation of sentinel surveillance sites, and coordination of rapid response teams. She noted that surveillance data have been regularly reported to FlUID since 2022 and that the National Health Laboratory has been formally designated as the country's NIC.

She pointed out that the key challenges identified include limited human resource capacity, staff turnover, low levels of medical requests for case detection, procurement and logistical delays, and the sustainability of operations dependent on external funding. Ms Ximenes highlighted that these constraints have affected routine surveillance and laboratory testing, requiring strengthened coordination, monitoring, and supervision. Lessons learned include the value of collaborative implementation with local and international partners and the importance of integrated influenza and SARS-CoV-2 testing at sentinel sites.

Ms Ximenes further highlighted that priorities for the 2026-2027 biennium include conducting quarterly evaluations of surveillance sites, intensifying training and mentoring for surveillance focal points, and strengthening capacities for surveillance data management and reporting. She also outlined plans to enhance collaborative surveillance between the human and animal health sectors through a One Health approach and to reinforce laboratory capacity for the confirmation of priority respiratory pathogens. These efforts are expected to support the sustainability of surveillance operations, strengthen the early detection of outbreaks, and facilitate timely, evidence-based public health interventions.

Ms Ximenes emphasised that the integrated surveillance system, strengthened laboratory capacity and collaborative networks position Timor-Leste to maintain robust pandemic preparedness, contribute to regional influenza monitoring, and implement evidence-based interventions during future respiratory pathogen outbreaks.

11. Plenary Session V: Review of Implementation of Non-Country Based Workplans in SEAR

Following the above country presentations, Plenary Session V resumed with the remaining presentations.

11.1 PIP Output 3: Community Protection - Global Overview: Dr Supriya Bezbaruah, Technical Officer, WHO Headquarters, Geneva, Switzerland

Dr Supriya Bezbaruah delivered an online presentation on community protection under the PIP Framework, WHO's Health Emergency Preparedness, Response and Resilience (HEPR) Framework's and HLIP III. She explained that community protection aims to strengthen the capacity of individuals, communities, and local institutions

She highlighted three focus areas. First, RCCE activities strengthen community networks, embed RCCE in pandemic planning, and expand HIVE, an AI-enabled platform for connecting communities and improving information flow. Second, infodemic management builds national and regional capacities, adapts influenza-specific social listening taxonomies, and develops guidance to counter misinformation. Third, knowledge translation expands the EPI-WIN Knowledge Platform and establishes a Global Science and Knowledge Translation Network to link scientific information with policy and public understanding.

Dr Bezbaruah noted progress under PIP-PC, including strong regional and country collaboration and the sustaining of RCCE activities despite limited resources. The COVID-19 experience demonstrated the role of communities in implementing preventive measures, supporting vulnerable groups, and maintaining trust in public health institutions. She noted that persistent challenges include low compliance, limited vaccine uptake, misinformation amplified by influential actors, and a lack of sustainable social listening tools. These challenges highlight the need for adaptable, low-cost, scalable systems.

She outlined the deliverables and priorities under Output 3 for the 2026-2027 biennium, which focus on strengthening RCCE systems, enhancing knowledge translation, and building national capacities for infodemic management. Planned activities include providing technical support for the integration of RCCE into pandemic preparedness and response plans, strengthening networks and mechanisms for translating scientific evidence into policy and practice, and institutionalizing infodemic management capacities within ministries of health. Dr Bezbaruah emphasized the importance of embedding RCCE within national preparedness frameworks, maintaining routine infodemic monitoring and analysis, and investing in health literacy to enable communities to access, understand, and use health information effectively. These efforts are expected to foster informed, engaged, and resilient communities that are better prepared to respond to influenza pandemics and other respiratory disease threats.

11.2 South-East Asia Regional Update on Community Protection: Ms Tara Rose Aynsley, Consultant (Risk Communication, Community Engagement and Infodemic Management), WHE, WHO SEARO

Dr Rose Aynsley delivered an online presentation providing an overview of progress under Output 3, highlighting key achievements in 2025 and priorities for the 2026-2027 biennium. She reported that countries in the WHO South-East Asia Region have strengthened preparedness through enhanced RCCE systems, the expansion of community-based surveillance and early warning mechanisms, and the institutionalization of social and behavioural insights for public health emergency preparedness and response. Dr Aynsley introduced the SEAR Seasonal Influenza Dashboard, a newly developed tool designed to monitor public discourse, emerging trends, and information patterns related to influenza across digital platforms, supporting situational awareness and risk communication efforts. She emphasized alignment with the Pandemic Fund Multi-country Project on RCCE system strengthening, implemented jointly by UNICEF, WHO, and the International Federation of Red Cross and Red Crescent Societies (IFRC) across six countries, to promote coordinated regional preparedness, strengthen community resilience, and enhance readiness for influenza pandemics and other respiratory disease threats.

She further mentioned that in 2025, substantial progress was made in strengthening RCCE systems and capacities. Three streams of work were implemented by strengthening community workforces for localised emergency response, establishing community-based surveillance for early detection, and institutionalising social and behavioural data for public health decision-making. She also mentioned that 2025 Annual Regional Forum on Community Engagement and Resilience will provide practical, skills-based training on using social and behavioural data for emergency management. Member States will also consult on investments required to advance the use of this data at national and regional levels. These efforts contribute to a coordinated approach to public health emergency preparedness and community resilience.

Dr Aynsley noted that knowledge translation capacities were advanced through the establishment of the Asia Pacific Community of Practice on Community Resilience and Engagement (AP-CoP-CoRE), which serves as a platform for collaboration, resource

mobilisation and technical guidance. Despite the withdrawal of US funding and its impact on partner agencies, consultations on the concept design have continued. The CoP aims to facilitate the sharing of tools, training and best practices among Member States and stakeholders, supporting coordinated preparedness and response efforts. This initiative strengthens regional planning, advocacy and priority-setting for community-centred approaches to public health emergencies.

Dr Rose Aynsley highlighted that countries in the Region have continued to strengthen infodemic management capacities, including through pilot assessments conducted in Sri Lanka and Thailand and the provision of operational support during public health emergencies, such as the response to the Myanmar earthquake and avian influenza outbreaks. She presented the newly developed South-East Asia (SEA) Seasonal Influenza Social Listening Dashboard, which enables the systematic monitoring of digital platforms to identify emerging trends, misinformation, information gaps, public perceptions, and concerns related to influenza. The dashboard is intended to support surveillance, risk communication and community engagement and vaccination-related initiatives through the timely generation of actionable insights.

Looking ahead to the 2026-2027 biennium, Dr Aynsley noted that regional priorities include strengthening national RCCE plans and standard operating procedures, establishing a regional roster of trained social epidemiologists, and supporting Member States in building sustainable capacities for infodemic management. These efforts aim to strengthen inclusive governance mechanisms, empower community-level workforces, promote equity in preparedness and response, and document and disseminate best practices for community-centred health emergency management.

11.3 Planning for Access, Allocation and Deployment of Pandemic Supplies: Dr Ioana Ghiga, Medical Countermeasures Unit, Epidemic and Pandemic Management Department, WHO Headquarters, Geneva

Dr Ioana Ghiga delivered an online presentation on planning for the access, allocation and deployment of pandemic medical countermeasures. She highlighted that WHO currently holds approximately 10-11% of anticipated pandemic vaccine production, alongside five million therapeutics and diagnostic kits, with additional supplies expected during a pandemic. She emphasised that effective preparedness requires robust coordination structures, standardised procedures and operational frameworks at global and national levels to ensure that medical countermeasures are accessed, allocated and deployed efficiently, while enabling countries to rapidly receive and implement these products

She also noted that, at the global level, WHO is developing two interconnected documents. The Operational Strategy for Access to Pandemic Influenza Medical Countermeasures outlines end-to-end processes for pandemic response in collaboration with partners and is applicable to any future pandemic. The Global Allocation Framework provides detailed guidance for Member States on allocation principles, criteria and governance structures, building on PIP allocation principles with enhanced operational detail. In September, a global simulation exercise tested the allocation framework, engaging WHO headquarters, regional offices, industry and partners, including CEPI, Gavi, UNICEF, UNITAID, FIND and HERA, identifying gaps and informing technical work.

She further added that, at the national level, post-COVID-19 guidance supports Member States in developing NDVPs for pandemic influenza and other respiratory pathogens. The guidance is systems-focused, covering 16 functional areas, with a related tool enabling countries to assess medical countermeasure introduction capacities and monitor progress visually. Stockpiling guidance assists countries in deciding whether and how to stockpile vaccines, therapeutics, diagnostics and PPE based on risk assessment. Ethical guidance, developed with WHO's Ethics Advisory Group, helps countries prioritise medical countermeasures fairly and transparently without replacing Strategic Advisory Group of Experts on Immunization (SAGE) or other expert policy guidance.

She highlighted that WHO conducts combined training and simulation workshops with regional and country offices to support implementation. Multidisciplinary teams, including immunization, regulatory, risk communication and emergency preparedness experts, work with national stakeholders to review guidance, run simulations and develop detailed roadmaps for updating and operationalising NDVPs. These efforts ensure that countries are ready to deploy medical countermeasures effectively during a pandemic, strengthening preparedness, equity and operational efficiency.

12. Plenary Session VI: Updates from Members of the Global PIP Advisory Group

12.1 Updates from the global PIP Advisory Group: Dr Farida Al Hosani, Chair, WHO Pandemic Influenza Preparedness (PIP) Framework Advisory Group

Dr Farida Al Hosani delivered an online presentation providing an overview of the PIP Framework Advisory Group, including its mandate, strategic priorities, the evolving global health context, and approaches to sustaining influenza preparedness. She highlighted that reductions in global health financing during 2024-2025 have affected influenza surveillance systems, the functioning of the Global Influenza Surveillance and Response System (GISRS), and broader pandemic preparedness and response capacities. Dr Al Hosani emphasized the importance of integrating influenza preparedness into broader pandemic preparedness, health security, and Universal Health Coverage (UHC) agendas to enhance sustainability and country ownership. She also underscored the need to explore innovative financing approaches, strengthen domestic resource mobilization and co-financing mechanisms, and expand regional vaccine manufacturing capacities to ensure the long-term sustainability of influenza preparedness and response efforts.

She described how the advisory group reviewed lessons learned from PIP operations, including equitable virus sharing, transparent governance, and the role of GISRS in vaccine development, diagnostics and antiviral testing. Dr Hosani noted that these operational models can inform the design of the new global pandemic agreement. She stressed that sustaining GISRS operations is critical for the timely collection and distribution of influenza viruses with pandemic potential, guided by Standard Material Transfer Agreements.

Dr Farida Al Hosani further emphasized the importance of strengthening national core capacities for pandemic preparedness and response, promoting the exchange of best practices among Member States, and advancing the implementation of One Health

approaches to address the risks posed by emerging and zoonotic influenza viruses. She highlighted the value of seasonal influenza vaccination programmes as a key component of prevention and preparedness efforts and underscored the importance of maintaining public trust through effective engagement across both traditional and social media platforms. Dr Al Hosani noted that the PIP Framework Advisory Group continues to oversee the implementation of the Framework, providing strategic oversight, monitoring progress, and offering recommendations to WHO leadership to strengthen global influenza preparedness and response capacities.

She further noted that strategic coordination, sustained technical support, and innovative financing mechanisms are critical to ensuring the long-term sustainability of national influenza programmes. She emphasized that continued investment in these areas is essential to respond effectively to both seasonal influenza and emerging pandemic respiratory pathogens.

13. Plenary Session IV: Sharing of Best Practices by Invited Technical Experts, Academic Institutions and Centres of Excellence Mobilised by SEARO

13.1 Unity Studies Network: Importance for Pandemic Preparedness in Countries - Sri Lanka Experience: Prof Neelika Malavige, Department of Immunology and Molecular Medicine, University of Sri Jayewardenepura, Sri Lanka

Prof Neelika Malavige outlined the implementation of WHO UNITY studies in Sri Lanka during the COVID-19 pandemic, focusing on respiratory virus surveillance, First Few X cases and contacts (FFX), seroprevalence studies, and vaccine immunogenicity research. She noted that UNITY protocols facilitated structured, comparable investigations, allowing Sri Lanka to collect data on community transmission, vaccine uptake, and population immunity in children aged 10-20 years. During September 2022 to March 2023, over 5,200 children were recruited, revealing high seropositivity rates in both vaccinated and unvaccinated groups.

The studies provided valuable insights into neutralising antibody responses, the durability of vaccine-induced immunity, and population-level immunity against SARS-CoV-2 and related viruses. Prof Malavige emphasised that these studies informed the early detection of outbreaks, the identification of viral pathogens through metagenomic workflows, and surveillance during inter-pandemic periods. The UNITY framework enabled the integration of genomic surveillance with outbreak investigations, reinforcing preparedness for respiratory pathogens beyond COVID-19.

She further noted that planned activities under the UNITY study network include the expansion of seroprevalence and immunogenicity studies, enhanced genomic surveillance, and strengthened cross-sectoral collaboration for early warning systems. Prof Malavige highlighted Sri Lanka's role as a key early research site in the WHO South-

East Asia Region, facilitating capacity-building, research translation, and alignment with the PIP Framework and the Preparedness and Resilience for Emerging Threats (PRET) initiative.

The UNITY studies were described as critical for strengthening real-time surveillance, early warning and decision-making capabilities. Prof Malavige noted that these initiatives position Sri Lanka as a regional leader in pandemic preparedness, supporting evidence-based interventions, capacity-building and long-term resilience against respiratory pathogens.

13.2 Influenza A Virus Surveillance in SEAR: Scoping Review of Swine Influenza Surveillance: Dr Manoj Murhekar, National Institute of Epidemiology, Indian Council of Medical Research, Chennai, India

Dr Manoj Murhekar presented a scoping review of swine influenza virus surveillance in the WHO South-East Asia Region, emphasising the critical role of pigs as mixing vessels for zoonotic influenza viruses. Swine-derived influenza A(H1N1) was identified as the cause of the 2009 influenza pandemic, highlighting the pandemic potential of influenza A virus (IAV) emergence in settings characterised by high population density and close human-animal contact. Dr Murhekar stressed that existing IAV surveillance systems in SEAR are often fragmented, short term, and lack standardised protocols, underscoring the need for integrated human-swine-poultry surveillance to support early detection and preparedness. The review aimed to describe established surveillance systems at the human-swine interface, focusing on surveillance objectives, target populations, sampling strategies, and virus detection methods

The methodology followed the PRISMA-ScR framework, covering studies from PubMed, Scopus and Web of Science up to July 2024, and a total of 42 articles were included in the analysis. Dr Murhekar described the global distribution and key characteristics of swine influenza virus surveillance systems, such as the RESAVIP network in France, which monitored the genetic diversity, epidemiological patterns and severity of swine influenza virus in pigs through farm-based reporting, nasal swab collection and real-time RT-PCR testing. The review highlighted gaps in SEAR, including short-lived, project-based surveillance systems, limited coverage of backyard and non-commercial farms, and insufficient integration of human and poultry sampling with swine monitoring.

The review concluded that strengthening swine influenza virus surveillance is an important component of pandemic prevention and global health security. Dr Murhekar recommended mapping human-swine interfaces, assessing the risk of zoonotic spillover, and aligning surveillance strategies with risk profiles, feasibility, and cost-effectiveness considerations to support early warning and preparedness for the emergence of IAVs with pandemic potential.

13.3 Influenza Preparedness in Sri Lanka: Strategic Value of Two Symposia in the Global Public Health Summit 2025: Dr Vindya Kumarapeli, President, College of Community Physicians of Sri Lanka

Dr Vindya Kumarapeli presented the strategic value of two symposia on influenza preparedness held during the Global Public Health Summit 2025, hosted by the College of Community Physicians of Sri Lanka and the University of Colombo. The summit focused on strengthening health system governance, including epidemic preparedness, and brought together nearly 500 participants from 20 countries, providing a platform for knowledge exchange and the dissemination of research findings.

She described how Plenary Session 3 highlighted UNITY studies for influenza and respiratory pathogens, integrating lessons from Sri Lanka's COVID-19 experience, regional SEA studies and early-stage investigations. Dr Kumarapeli noted that these symposia aligned with Sri Lanka's "One Vision, One Shield" initiative and enhanced real-time surveillance, early warning systems and pandemic decision-making capabilities.

The second symposium focused on maternal influenza immunisation, emphasising protection for mothers and newborns, strengthening routine services and addressing policy and logistical barriers. Contributions from global and regional experts reinforced health equity, resilience and preparedness. Dr Kumarapeli highlighted the operationalisation of global frameworks, the protection of vulnerable populations, and the strengthening of all six pillars of the health system.

Looking ahead, she noted that the Global Public Health Summit 2026 will commemorate 100 years of public health in Sri Lanka, showcase leadership in pandemic preparedness, and provide opportunities for regional technical exchange. Dr Kumarapeli emphasised the importance of strategic collaboration to align implementation of the PIP Framework and the Preparedness and Resilience for Emerging Threats (PRET) initiative with centenary goals, document best practices, and mobilise partnerships to strengthen sustainable health security.

14. Concluding Session

Following the successful completion of all plenary sessions, which were thematically and logically structured as described above, the Chair and Co-Chair expressed their appreciation to all presenters and participants for their contributions to a highly informative and engaging meeting, characterised by excellent presentations and active discussions. The Chair then formally handed over the proceedings to the WHO Secretariat.

Dr Pushpa Ranjan Wijesinghe invited the rapporteur, Professor Nuwan Wickramasinghe, to present the key points emerging from the discussions held during the two-day meeting. Professor Wickramasinghe summarised the main observations and recommendations arising from the deliberations.

- During the review of PIP-PC fund implementation in 2024-2025, PIP-PC eligible Member States highlighted multiple challenges encountered during the current biennium.

- Drawing on lessons learned, Member States and WHO country offices are requested to develop plans to mitigate the impact of these challenges, as well as anticipate and address potential challenges that may arise during the implementation of country-based PIP-PC workplans in the upcoming biennium (2026-2027).

Ensuring financial sustainability for influenza preparedness and response

- Since PIP-PC resources are catalytic in nature, sustaining pandemic influenza preparedness across the four key outputs requires Member States to advocate for long-term, innovative and sustainable financing mechanisms and investments. Such advocacy should promote country ownership, the integration of influenza preparedness into national health plans, and the mobilisation of multisource financing, ensuring that domestic resources are complemented by external support, including PIP-PC.
- To ensure sustainable collaborative surveillance through GISRS (Output 2), Member States are encouraged to move beyond project-based approaches to influenza preparedness and to integrate influenza and other respiratory pathogen pandemic preparedness activities within broader national health systems and health security frameworks.
- Strengthening advocacy at national, regional and global levels is essential to promote sustained political commitment and visibility for PIP. Member States and WHO offices are encouraged to leverage the documentation and dissemination of impact stories as advocacy tools to engage decision-makers and partners and sustain long-term investment.

Maintaining the minimum essential core sentinel surveillance activities.

- In the current financial landscape, to minimise costs, sustain sentinel surveillance and maximise the impact of PIP-PC, Member States are encouraged to review, streamline and prioritise surveillance objectives and their scope.
- As part of cost-minimisation efforts, Member States are requested to maintain at least a minimum essential level of surveillance by:
 - Selecting strategic surveillance sites and optimising resource utilisation.
 - Adhering to WHO or nationally defined minimum essential surveillance standards and guidelines.
 - Separating surveillance activities from non-surveillance laboratory testing.
 - Right-sizing sentinel surveillance sites to ensure efficient and effective disease monitoring.
 - Aligning technical assistance and financial investments with priority surveillance objectives.
- Such an approach will maximise the return on PIP-PC funds through complementary investments under Output 2.

- Along these lines, Member States are encouraged to integrate influenza surveillance within broader national surveillance and monitoring systems for respiratory pathogens. This approach will help to:
 - Achieve greater financial sustainability.
 - Improve cost-effectiveness and optimise the use of limited resources.
 - Avoid duplication of surveillance efforts.
 - Generate long-term efficiencies through the early detection of influenza and other respiratory pathogens with epidemic or pandemic potential, and the timely implementation of public health interventions.
- Such integration will support the achievement of Output 2 of the High-Level Implementation Plan III (HLIP III) through complementary national investments, including those supported by the PIP-PC.

Burden of disease (BoD) estimates and vaccine decision-making.

- PIP-PC recipient Member States are encouraged to generate evidence to inform policy development, with a view to ensuring equitable and sustainable access to seasonal and pandemic influenza vaccines and other influenza-related products under Output 1 (Policies and Plans).
- Member States are encouraged to optimise the use of PIP-PC and other complementary funding sources to generate high-quality, context-specific BoD data to inform evidence-based seasonal influenza vaccination policies and prioritisation.
- WHO Head Quarters, SEARO, and Country offices are requested to support PIP-PC recipient countries in planning and conducting country-specific BoD estimates, thereby contributing to improved performance against the relevant indicator in the Monitoring and Evaluation Framework under Output 1 of HLIP III.
- Based on national capacities, available resources and country-specific needs, Member States are requested to:
 - Conduct feasibility assessments for BoD estimation studies
 - Develop roadmaps for BoD estimation studies based on the findings of feasibility assessments.
 - Undertake national BoD estimations to inform evidence-based policy development and preparedness planning.

Aligning PIP-PC investments with country priorities

- Although Member States currently implement standalone workplans under Outputs 1 and 2, the advancement of PRET-based respiratory pathogen pandemic preparedness planning has led an increasing number of Member States to initiate activities under Output 3 (Community Protection) and Output 4 (Access to Medical Countermeasures). It is therefore recommended that WHO Headquarters and SEARO engage with PIP-PC recipient Member States to identify priority needs and funding gaps, with a view to providing targeted support for community protection and access to medical countermeasures during the forthcoming PIP-PC implementation biennium.

- Considering that the content and scope of the four outputs have evolved since the implementation of HLIP III, it is recommended that countries identify and communicate their specific needs, requirements and proposed modifications to the HLIP III operational plan during the planned mid-term evaluation of HLIP III. WHO SEARO is requested to facilitate the participation of PIP-PC-eligible Member States in the evaluation through the PIP Secretariat.
- While Member States acknowledged the limitations on the extensive use of PIP-PC funds for surveillance activities, Member States and representatives of the PIP Advisory Group requested WHO to support countries in maintaining core influenza surveillance capacities and ensuring the timely sharing of influenza viruses with WHO Collaborating Centres. They also requested WHO to explore mechanisms for pooled or centralised procurement of laboratory reagents, particularly to support smaller Member States that face higher procurement costs due to limited economies of scale.

Collaborations with centres of excellence and academia

- Member States are encouraged to foster partnerships with WHO CCs, national and international centres of excellence, academic institutions and research networks, with a view to collaborating in the generation of high-quality deliverables under the respective outcomes of HLIP III.
- Member States are encouraged to leverage such collaborations to support BoD estimation studies, synthesise evidence for vaccine policy and decision-making, develop policies on the use of influenza vaccines and other influenza-related medical products, assess and demonstrate the impact of PIP-PC investments, undertake operational research, and prepare manuscripts for publication in peer-reviewed scientific journals.
- PIP-PC recipient Member States are also encouraged to leverage these collaborations to access and utilise expertise that may be limited or unavailable nationally, particularly in areas affected by high attrition of skilled human resources.

Validating in-house assays through WHO CCs

- The meeting emphasised the importance of maintaining consistent and regular influenza testing at NICs. Considering the current uncertainties regarding the supply of International Reagent Resources (IRR), and within the collaborative surveillance component (Output 2), Member States requested WHO to explore collaboration with WHO CCs and NICs in countries such as India and Thailand to develop in-house assays and validate them through WHO CCs or other reference laboratories to ensure standardisation and quality. WHO was also requested to facilitate the procurement of relevant reagents through PIP-PC funds, subject to applicable project terms and conditions.

Reflections on the Monitoring and Evaluation Framework for HLIP III

- PIP-PC recipient Member States, together with WHO Country Office teams, are requested to review the relevant indicators in the HLIP III Monitoring and Evaluation Framework and plan reporting in accordance with the established timelines. Member States are further requested to assess progress against these indicators at the end of the current biennium (2025) and identify areas requiring improvement for prioritisation and action during the 2026-2027 biennium.

Documentation and Dissemination of Impact Stories

- Member States and WHO country offices are requested to document impact stories and operational case studies from 2025 and throughout the next biennium. These should reflect achievements, innovations and lessons learned, particularly in the context of PIP-PC implementation.
- PIP-PC recipient Member States, WHO SEARO and WHO Country Offices are encouraged to share these documented experiences through regional knowledge-sharing platforms and webinars. Such dissemination will support advocacy for sustained investment in pandemic preparedness and promote the exchange of regional best practices.
- To reach a broader audience, including researchers, academics, the public and stakeholders beyond policymakers and service providers, Member States and offices are encouraged to publish selected case studies and impact stories in peer-reviewed journals.

Support for early investigations and Unity studies

- It was highlighted that six Unity studies sites across five countries in WHO SEAR are part of the WHO GISRS Unity Studies Network. These sites play a vital role in generating standardised, timely and comparable data to inform public health responses. Given the availability of standard Unity Studies protocols for early investigations during pandemics and epidemics, Member States are encouraged to:
 - Adopt and adapt appropriate Unity studies protocols within national contexts, particularly as part of preparedness efforts during the inter-pandemic period.
 - Mobilise support from existing Unity Studies sites within SEAR that are part of the WHO GISRS Unity Studies Network, as well as from national institutions with relevant expertise and capacity, to facilitate the effective implementation of these studies.
 - Strengthen national readiness by integrating Unity Studies protocols into pandemic preparedness plans and ensuring that the necessary ethical, logistical and technical frameworks are in place to enable their rapid deployment during epidemics and pandemics.
 - While a nominal allocation from the regional PIP-PC budget has been reserved as catalytic support for this activity, Member States/Unity studies sites are encouraged to explore alternative domestic and external funding sources to sustain and expand activities initiated through PIP-PC support.

Following the presentation of the key discussion points, Dr Wijesinghe invited all participants, both those attending in person and those joining virtually, to provide their comments and reflections. This was intended to enhance the accuracy, completeness and relevance of the synthesised findings, ensuring that all perspectives were captured and incorporated. Participants were encouraged to share additional insights, clarify points and highlight areas requiring further attention, which would subsequently be consolidated and circulated for broader input. With the conclusion of this session, the first component of the meeting was formally completed.

15. Component II: National Influenza Pandemic Preparedness Planning and Preparedness and Resilience for Emerging Threats (PRET)

Day 3: 29 October 2025

15.1 Opening Session

Overview of the PRET Component of the Meeting

Dr Pushpa Ranjan Wijesinghe, Programme Area Manager, Pandemic & Epidemic Management, WHE, WHO SEARO

Dr Pushpa Ranjan Wijesinghe presented an overview of the Preparedness and Resilience for Emerging Threats (PRET) initiative, outlining its role in strengthening pandemic preparedness across the WHO SEAR. He traced pandemic preparedness planning in the Region back to 2006, when countries developed National Influenza Pandemic Preparedness Plans (NIPPPs) that integrated emergency preparedness and response measures for avian and pandemic influenza. These plans included integrated communication strategies and were further adapted during the 2009 influenza A(H1N1) pandemic. Following the pandemic, countries updated their NIPPPs in line with the WHO Pandemic Influenza Risk Management (PIRM) framework (2017). The COVID-19 pandemic highlighted both strengths and gaps in preparedness and response capacities, leading to the development of the PRET initiative as a broader framework for pandemic preparedness and planning for respiratory pathogens.

He explained that PRET framework leverages common systems, capacities, knowledge and tools for pathogen groups based on their mode of transmission. Central principles include equity, inclusivity and coherence, enabling collaborative and integrated planning. Dr Wijesinghe emphasised the need for comprehensive strategies addressing all respiratory pathogens with epidemic or pandemic potential, including the adaptation of national preparedness plans, multisectoral consultations and integration with existing national emergency response frameworks

He further highlighted that key regional activities included the IHR National Focal Point webinar to introduce the PRET framework in August 2023 and the first regional meeting on PRET planning in New Delhi in October 2023, which consulted Member States

on adapting PRET for broader respiratory pathogen planning, identifying support needs, reviewing priorities and drafting skeletal NIPPPs. The meeting highlighted that an enabling policy environment exists for broad respiratory pathogen pandemic planning, lessons from COVID-19 provide a springboard and multisectoral coordination remains challenging. The PRET framework provides monitoring and evaluation guidance to address these challenges.

Following the regional meeting, country-specific next steps were defined, including workshops, Ministry of Health consultations, orientation sessions and gap identification in India, Sri Lanka, Bangladesh, Indonesia, Nepal, Bhutan, Thailand, Maldives, DPRK and Myanmar. The initiative supports integrated, evidence-based respiratory pathogen preparedness, promotes cross-sectoral collaboration and strengthens national and regional capacities for pandemic response under the PRET framework.

In this context, he highlighted that the meeting aimed to review and document observations and feedback from Member States, partners, all three levels of WHO, and invited technical experts on key components of the draft Regional Roadmap and Action Framework for the implementation of PRET-based pandemic preparedness and response plans for respiratory pathogens, including NIPPPs, across the WHO SEAR.

15.2 Plenary Session I: Updates on the Implementation of the PRET Initiative and National Influenza Pandemic Preparedness Plan (NIPPPs)

Global Updates on PRET, Including Preparedness and Response to Arbovirus Epidemics and Pandemics: Dr Oluwatosin Akande, Technical Officer, Epidemic and Pandemic Management Department, WHO Headquarters

Dr Oluwatosin Akande presented global updates on the PRET initiative, emphasising its role in respiratory and arbovirus epidemic and pandemic preparedness. She explained that PRET uses a hazards-based approach, leveraging common systems, capacities, knowledge and tools for pathogen groups based on their mode of transmission, including respiratory, arthropod-borne and foodborne pathogens. This approach reduces duplication, increases efficiency and enables preparedness for both known and unknown pathogens, including “Pathogen X”. She noted that, for respiratory pathogens, WHO encourages countries to develop integrated pandemic plans, either as pathogen-specific plans adaptable to other respiratory threats or as all-hazards plans with respiratory-specific annexes.

Dr Akande highlighted global PRET implementation, with 24 countries having finalised pandemic plans using the PRET approach, 38 having drafted plans, and over 124 countries having participated in related activities, including workshops, SimExs and webinars. SimExs were conducted in more than 15 countries, including a multi-country exercise across 11 SEAR Member States, engaging multisectoral stakeholders from sectors such as faith, labour, youth and urban health resilience.

She further added that PRET has expanded to arbovirus epidemic and pandemic preparedness. She noted that 81% of countries report gaps in integrated arbovirus planning, which is critical in settings where multiple arboviruses co-circulate. Integrated planning strengthens surveillance, vector control and outbreak response while optimising resources. WHO has developed tools for arbovirus preparedness, including risk assessments, planning modules and policy briefs, to guide subnational, national, regional and global stakeholders in plan development and implementation.

Dr Akande highlighted that PRET enhances efficiency, leverages existing capacities, engages cross-sectoral partners, builds on routine health systems and prepares for known and emerging pathogens. Success requires a whole-of-government and whole-of-society approach, with WHO providing ongoing technical support to accelerate country-level implementation.

Regional Update on PRET Implementation in SEAR: Intercountry PRET SimEx 2024: Dr Ashok Basnet, Consultant (PIP), WHE, WHO South-East Asia Regional Office (SEARO)

Dr Ashok Basnet provided a detailed overview of PRET implementation and the intercountry simulation exercise (SimEx) conducted in the WHO SEAR in 2024. He reviewed the background to PRET implementation in the Region, noting its alignment with the annual PIP-PC Meeting held in New Delhi on 17-18 October 2024, during which the final two days were dedicated to PRET-related components, including the regional SimEx. The PanPRET-2 exercise aimed to strengthen regional capacities for preparedness and planning for pandemic influenza and other respiratory pathogens, test multilateral coordination and communication mechanisms, clarify the roles and responsibilities of countries and international stakeholders, and identify opportunities for cross-border collaboration.

Dr Basnet described how PanPRET-2 a tabletop, discussion-based SimEx using an adaptable toolkit to tailor scenarios for different groups of countries, including landlocked and small-island nations was used in SEAR. The exercise validated existing respiratory epidemic and pandemic plans, facilitated the development of new plans and advocated for sustained preparedness. Countries were grouped by geographic proximity and similarities in public health threats. The scenario featured a novel respiratory virus progressing through five stages, with eight injects, including outbreak detection, community transmission, regional and international trade and travel, impacts on marginalised populations and post-outbreak recovery. Country identities were anonymised, and the scenario was adapted to SEAR to ensure relevance and support unbiased discussion.

He further noted that key lessons included the need for regularly updated, integrated respiratory pandemic plans with strong multisectoral engagement and operational readiness, guided by a One Health approach. The exercise highlighted the value of regular SimExs, real-time surveillance, timely data sharing, GISRS integration and legal frameworks for sample sharing and risk assessment. Cross-border collaboration and communication require formal MoUs and SOPs for joint investigations and responses. Inclusive RCCE strategies are essential to reach marginalised populations, counter

misinformation and maintain public trust. Post-outbreak recovery planning was identified as a critical gap.

Dr Basnet mentioned that, following the SimEx, Member States, including DPR Korea, India, Nepal, Bangladesh and Sri Lanka, initiated updates to their NIPPPs based on PRET guidance and conducted or planned national-level simulations. SEARO began drafting a regional roadmap and strategic action framework to support broader respiratory pathogen pandemic planning, providing technical support for plan updates and future SimExs.

Evolution of NIPPPs in SEAR: 2006 to PRET Era: Dr Alka Aggarwal Singh, Consultant, Pandemic and Epidemic Management Unit, WHO SEARO

Dr Alka Aggarwal Singh presented a comprehensive review of the evolution of NIPPPs across the ten Member States of the WHO SEAR, documenting key milestones from 2006 to 2024 and identifying lessons to inform future planning. The review utilised a 10-question, Excel-based questionnaire distributed through SEARO's ten WHO country offices, with data collected over a five-week period in mid-2025. Desk reviews, data validation, and virtual consultations were undertaken to ensure accuracy; however, variability in documentation and the self-administered nature of the questionnaire required follow-up to address gaps and ensure completeness. The process also served as an important mechanism for supporting planning and advocacy for pandemic preparedness.

She described how the findings indicated that six countries developed their first NIPPP by 2006, demonstrating early commitment, while most countries revised their plans at least once. Six countries updated or were updating their plans within the last three years, whereas four had not revised theirs for six years or more. Five countries incorporated lessons from COVID-19, and five conducted SimExs, two of which included subnational exercises. Thailand was unique in having a budgeted NIPPP with a monitoring and evaluation framework. A regional trend was noted towards transitioning from influenza-specific plans to broader respiratory pathogen preparedness in alignment with the PRET framework.

She further described how country-specific observations included Bangladesh, which developed and updated its NIPPP early but has yet to conduct its first SimEx; Bhutan, which updated its NIPPP in 2024 and conducted a national SimEx, although PRET alignment remains pending; DPR Korea, which conducted national and subnational SimExs in 2024-2025 and is undertaking PRET-aligned updates; India, which is developing a broader respiratory pathogen plan but has not conducted a SimEx; Maldives, which has maintained periodic updates and PRET alignment, although influenza-specific components require revision and testing; Myanmar, which conducted a tabletop exercise in 2019; Nepal, whose NIPPP was last updated in 2019, highlighting the need for COVID-19 integration and PRET alignment; Sri Lanka, which is expanding its NIPPP to cover broader respiratory pathogens and has opportunities to conduct its first SimEx; Thailand, which updated its NIPPP in 2024, including budgeted monitoring and evaluation, and

plans further revisions in 2027-2028; and Timor-Leste, which conducted subnational and national SimExs in 2022-2023, while its 2015 NIPPP update remained in draft form.

Dr Singh further added that, regionally, half of the countries updated their plans to incorporate lessons from COVID-19, and half conducted SimExs, some of which included subnational testing. Key opportunities included ensuring budgeted plans with monitoring and evaluation frameworks, regular revisions every three to five years, structured situation analyses and scaling up SimExs. Dr Singh recommended integrating NIPPPs into broader national health security planning, institutionalising periodic updates, incorporating lessons from COVID-19, conducting multisectoral analyses and implementing regular SimExs to strengthen pandemic preparedness and response across SEAR.

15.3 Plenary Session II: Landscape of National PIP and PRET Planning in SEAR

This plenary session included updates on national PIP and PRET planning in SEAR Member States.

Democratic People's Republic of Korea: Ms Anupurba Roy Chowdhury, Technical Officer (Laboratory Specialist), WHO Country Office, DPR Korea

Ms Anupurba Roy Chowdhury provided an update on the Democratic People's Republic of Korea's implementation of the Pandemic Influenza Preparedness Framework and integration of the PRET framework. The NIPPP, first developed in 2006 and subsequently updated in 2009 and 2019, is scheduled for revision in late 2025 or early 2026. The NIPPP is integrated within the national health security framework and aligned with PRET principles, encompassing influenza and broader respiratory pathogen surveillance, early warning systems, emergency response activation, surge capacity deployment, risk communication, maintenance of essential health services, and the provision of vaccines and antivirals. Plans are under way to strengthen genomic surveillance of respiratory pathogens. The National Immunization Technical Advisory Group remains functional and has supported the achievement of more than 95% coverage with trivalent influenza vaccine, thereby contributing to strengthened community protection.

She further added that DPR Korea remains committed to ongoing NIPPP updates reflecting evolving epidemic dynamics and health system advancements. A significant milestone in 2025 was the virtual orientation and tabletop SimEx conducted in May, led collaboratively by WHO headquarters, regional and country offices. This first-of-its-kind exercise in SEAR enabled interactive participation across multiple locations and was tailored to the context of DPR Korea. Objectives included orientation on the PRET framework, strengthening emergency response capacity, promoting equity and inclusivity, and enhancing intersectoral collaboration.

She explained that the simulation exercise was based on a hypothetical outbreak of a novel influenza virus in Country X, with participants assuming key response roles. Activities included conducting rapid risk assessments for potential cross-border transmission, implementing national notification procedures, engaging with WHO, and managing public concerns and misinformation. Outcomes included increased awareness

of the importance of integrated planning, strengthened emergency coordination across sectors, and validation of operational readiness.

The exercise facilitated the systematic integration of PRET principles into the NIPPP, strengthening approaches to risk assessment, early warning, intersectoral coordination, and pathogen-agnostic preparedness based on modes of transmission. Key lessons highlighted the importance of intersectoral collaboration, proactive public health leadership, and sustained commitment to PRET implementation. She added that next steps include conducting follow-up simulation exercises to further refine emergency response arrangements and convening a national workshop to finalise the NIPPP in alignment with PRET.

Maldives: Ms Mariyam Sheeban, Senior Public Relations Officer, Health Protection Agency, Ministry of Health

Ms Mariyam Sheeban reported that the Maldives has been strengthening its influenza pandemic preparedness under the PIP and PRET frameworks through targeted capacity-strengthening initiatives. Key activities included training for Health Emergency Operations Centres (HEOCs), simulation exercises to test Hospital Emergency Response Plans across three atolls (Shaviyani, Baa, and Meemu) and updating the National Pandemic Preparedness and Response Plan to incorporate PRET-based approaches. These efforts aim to enhance the readiness of health facilities, strengthen coordination between national and atoll-level HEOCs, and support the continuous refinement of preparedness and response arrangements based on lessons identified through simulation exercises.

She noted that Maldives has also facilitated regular shipments of influenza virus samples to WHO CCs, thereby sustaining contributions to the GISRS, improving virological monitoring and enabling the early detection of new influenza strains to inform vaccine selection. A national-level pandemic SimEx was conducted to assess overall preparedness and response coordination, identify gaps and bottlenecks, and strengthen multisectoral collaboration under the Health Emergency Coordination Committee. Additional interventions included the recruitment of a project coordinator for PIP and PRET implementation and specialised training for NIC staff in data management and analysis. These measures collectively enhanced national operational readiness and strengthened coordination among surveillance, laboratory and emergency response systems. Ms Sheeban highlighted that support from SEARO is sought for technical guidance, regional knowledge-sharing and the flexible use of PIP funds to facilitate timely implementation and sustain capacity-building efforts

Myanmar: Dr Mya Yee Mon, National Professional Officer, Disease Surveillance and Epidemiology, WHO Health Emergencies Programme at the WHO Country Office, Myanmar

Dr Mya Yee Mon provided an update on Myanmar's implementation of the PIP Framework. The country developed its first NIPPP in 2006, integrating human and animal health measures in alignment with the One Health approach, with technical support from

WHO and the Food and Agriculture Organization of the United Nations (FAO). Key milestones included the 2017 revision of the NIPPP in line with WHO Pandemic Influenza Risk Management (PIRM) guidance, the expansion of sentinel surveillance networks in 2018, and the 2019 functional command post simulation exercise, “Exercise Yun Bayin”, which tested the activation of the Emergency Operations Centre and inter-agency coordination, and identified operational gaps. A desk review conducted in 2021 identified additional gaps in multisectoral coordination, comprehensive risk assessment, surge capacity, occupational health measures, risk communication, non-pharmaceutical interventions, and monitoring and evaluation frameworks.

Dr Mon further noted that recommendations included integrating pandemic preparedness planning within an all-hazards, One Health framework; establishing a multisectoral pandemic preparedness committee with clearly defined roles and responsibilities; strengthening risk communication and community engagement (RCCE) systems; developing surge capacity plans for human resources, laboratory services, and logistics; and updating surveillance and laboratory strategies in alignment with the WHO PRET and Pandemic Influenza Severity Assessment (PISA) frameworks. She highlighted that, moving forward, Myanmar plans to revise its pandemic preparedness and response plan in 2026, incorporating lessons learned from the COVID-19 pandemic, strengthening private sector engagement and supply chain resilience, and conducting simulation exercises to test operational readiness.

Sri Lanka: Dr Nimal Gamagedara, Consultant Epidemiologist, Epidemiology Unit, Ministry of Health, Sri Lanka.

Dr Nimal Gamagedara reported on Sri Lanka’s national PIP and PRET planning efforts. These efforts have focused on strengthening the quality and management of surveillance through enhanced electronic reporting tools and registers, as well as on the development, finalisation, and formal approval of national plans, memoranda of understanding (MoUs), standard operating procedures (SOPs), and other administrative mechanisms to support multisectoral coordination. He noted that the process was guided by five cross-cutting recommendations: strengthening capacities through legislative, financial, and human resource development; enhancing multisectoral collaboration across surveillance, laboratory, and RCCE functions; promoting intersectoral action on antimicrobial resistance, zoonotic diseases, food safety, and chemical, biological, radiological and nuclear (CBRN) emergencies; linking national and provincial-level actions with implementation at service delivery level; and expanding the use of digital technologies, innovation, and public-private partnerships.

Dr Gamagedara further noted that Sri Lanka has developed a National Action Plan for Health Security (NAPHS), incorporating recommendations from the Joint External Evaluation (JEE) reports of 2017 and 2023 and adopting a One Health approach supported through the Pandemic Fund. A feasibility assessment of influenza burden estimation was conducted between April and May 2025, alongside two consultative meetings convened by the Ministry of Health to support the revision of the 2012 National Influenza Pandemic Preparedness Plan. He further noted that the gap assessment phase

for the National Respiratory Pathogen Pandemic Preparedness Plan is scheduled for the first quarter of 2026, with the revised Pandemic Influenza Preparedness Plan, aligned with the PRET framework, expected to be finalised by the third quarter of 2026. Subsequent simulation exercises are planned to further strengthen operational preparedness.

Timor-Leste: Ms Isabel Maria Gomes, Head, Surveillance and Epidemiology Department, Ministry of Health, Timor-Leste

Ms Isabel Maria Gomes reported on Timor-Leste's ongoing efforts to strengthen pandemic influenza preparedness. The country has been aligning its NAPHS with a draft Pandemic Influenza Preparedness Plan. The National Health Laboratory was recognised by WHO as the National Influenza Centre (NIC) in late 2023, strengthening virological surveillance capacity, virus sharing, and participation in the GISRS. Integrated surveillance for respiratory pathogens, including influenza and SARS-CoV-2, is being implemented through ILI and SARI sentinel surveillance sites, with a review conducted in 2023 providing recommendations to enhance the quality and sustainability of the system. Timor-Leste has also conducted national simulation exercises, including a humanitarian disaster scenario in December 2024, to test surge capacity, evacuation procedures, and coordination mechanisms. In addition, subnational simulation exercises have been conducted primarily for disaster response, with public health tabletop exercises identified as a feasible approach for wider implementation.

Ms Gomes pointed out that challenges include limited funding, staffing constraints, and the need to improve cold-chain facilities and secure storage. Priority actions for 2026-2027 include revising the national influenza and respiratory pathogen preparedness plan, mobilising financial resources (including bilateral donors and pandemic funds), and implementing capacity-building measures such as laboratory and simulation training, including recent and upcoming training in Thailand and the Republic of Korea. She added that WHO SEARO support will focus on technical assistance for PRET-aligned respiratory pathogen pandemic planning, the design and facilitation of national and subnational exercises, and the strengthening of laboratory and surveillance systems.

Thailand: Dr Pilailuk Akkapaiboon Okada, National Institute of Health, Department of Medical Sciences, Ministry of Public Health, Thailand. and Dr Paninee Panyakarn, Department of Disease Control, Ministry of Public Health, Thailand

Dr Pilailuk Akkapaiboon Okada and Dr Paninee Panyakarn outlined Thailand's influenza pandemic preparedness and its alignment with the PRET approach. Thailand initiated influenza pandemic planning in 2005 and has since strengthened its preparedness framework through successive iterations of the Emerging Infectious Disease Preparedness Master Operational Plan. The current plan covers the period 2023-2027. In addition, Thailand has developed dedicated Influenza Pandemic Preparedness Master Operational Plans for novel influenza, which function as NIPPP-equivalent operational plans. Recent planning efforts have increasingly integrated influenza preparedness with broader respiratory pathogen preparedness, in line with PRET principles.

The current framework focuses on integrated preparedness, prevention and response for influenza, COVID-19 and other emerging respiratory pathogens, with strengthened surveillance and response coordination. Surveillance is implemented through a One Health approach and includes cross-border monitoring. The National Institute of Health leads influenza and respiratory pathogen surveillance, supported by routine dashboards and virological surveillance, while implementation is overseen through working group meetings and field monitoring.

Preparedness and response are anchored in the Communicable Diseases Act A.D. 2015, which provides the legal foundation for planning and response activities. Despite the absence of reported human avian influenza cases since 2006, ongoing risks associated with wild birds, poultry production systems and regional transmission underscore the importance of sustaining NIPPP implementation in Thailand.

Key gaps identified include limited awareness of existing plans. Priority actions include strengthening dissemination of the plans, translating NIPPPs into operational actions at the implementation level, sustaining influenza surveillance dashboards, and continuing regular monitoring and evaluation to advance PRET-aligned respiratory pandemic preparedness.

India: Dr Mahesh Waghmare, Joint Director, National Centre for Disease Control, New Delhi, India

Dr Mahesh Waghmare described the development and operationalisation of the National Pandemic Preparedness Plan for Respiratory Viruses (PPP-RV), a comprehensive, scenario-based national plan applicable to all respiratory viruses with pandemic potential, drawing on lessons learned from the 2009 influenza A(H1N1) pandemic and the COVID-19 pandemic. The plan was developed through a structured and consultative process led by the National Centre for Disease Control, with technical support from WHO. The final PPP-RV clearly defines roles and responsibilities across ministries and agencies and establishes a stakeholder responsibility matrix to support multisectoral coordination.

He further noted that the PPP-RV covers five core operational components, including collaborative surveillance, emergency coordination, community protection, clinical care and access to countermeasures. The plan structures actions across key phases, including the pre-pandemic phase (risk assessment, surveillance, preparedness and early containment), the pandemic phase (management of community transmission, surge capacity and coordinated response), the post-pandemic recovery phase (after-action reviews and integration into routine systems), and inter-pandemic periods (ongoing surveillance, capacity-building and readiness).

Dr Waghmare further added that key gaps identified include fragmented data collection and sharing across sectors, workforce constraints, challenges related to emergency coordination, infodemic management, infection prevention and control, clinical surge capacity, and equitable access to countermeasures. Proposed actions focus on standardising surveillance data, using common dashboards and APIs, leveraging information technology and artificial intelligence, strengthening community reporting, establishing the National Joint Outbreak Response Team, improving surge capacity through training and simulation exercises, and strengthening the procurement, validation and equitable distribution of diagnostics, medicines and vaccines.

Bangladesh: Dr Ahmed Nawsher, National Influenza Centre (NIC), Institute of Epidemiology, Disease Control and Research (IEDCR), Bangladesh

Dr Ahmed Nawsher delivered an online presentation providing a country update from Bangladesh. The NIC has strengthened preparedness for respiratory pathogens through the integration of the PRET, PIP, HLIP III, IHR (2005), and One Health frameworks. Bangladesh's influenza surveillance system, established in 2007, currently operates through two platforms: the National Influenza Surveillance Bangladesh (NISB) System and the Hospital-Based Influenza Surveillance (HBIS) System, covering 10 tertiary hospitals and 9 district hospitals. He further noted that the key objectives include monitoring influenza seasonality, circulating strains and disease severity, as well as the early detection of novel influenza viruses with pandemic potential.

Dr Nawsher further noted that pandemic preparedness incorporates risk assessment through routine disease surveillance, event-based surveillance, rumour verification and cluster investigations. Bangladesh's One Health Strategic Framework (2024-2030) guides multisectoral collaboration to optimise human, animal and environmental health while supporting community engagement. He added that challenges include funding and resource limitations, constraints in health system capacity, limited access to logistics and laboratory equipment, and incomplete population coverage through sentinel surveillance sites.

Bhutan: Ms Deki Yangzom, Chief Programme Officer, Department of Public Health, Ministry of Health, Bhutan

Ms Deki Yangzom presented Bhutan's National Influenza Pandemic Preparedness and Response Plan 2025, building on previous plans (2006-2020) and harmonised with the Health Emergency and Disaster Contingency Plan 2024 and the WHO PRET framework. She noted that the plan provides a comprehensive whole-of-government and whole-of-society approach to pandemic preparedness, response and recovery. It includes surveillance, stockpiling, vaccination, public health education, surge capacity, collaborative surveillance, laboratory biosafety, IPC, risk communication and community engagement.

Ms Yangzom described how the National Task Force and Health Emergency Management Committee define the governance and incident command system, ensuring clear decision-making, coordination and activation of the Health Emergency Operations Centre during outbreaks or declared Public Health Emergencies of International Concern (PHEIC). She added that the National Influenza Pandemic Preparedness and Response Plan 2025 incorporates phased action plans across five key components, including emergency coordination, collaborative surveillance, community protection, clinical care and equitable access to countermeasures. She further noted that monitoring and evaluation mechanisms are aligned with the Health Emergency and Disaster Contingency Plan 2024, and that financing draws on both international support (WHO and the World Bank hosted Pandemic Fund) and domestic frameworks. The plan emphasises risk-based, equitable and inclusive preparedness, continuous learning and adaptability to emerging threats.

Nepal: Dr Mukesh Poudel, Section Chief, Epidemiology and Disease Control Division, Department of Health Services, Ministry of Health and Population, Nepal

Dr Mukesh Poudel highlighted that Nepal's 2019 National Pandemic Preparedness and Response Plan faced significant implementation challenges during the COVID-19 pandemic, revealing gaps in coordination, operational capacity, surge preparedness, risk communication and multisectoral engagement. In response, the Ministry of Health and Population initiated a comprehensive revision process, informed by evidence from national and subnational Intra-Action Reviews, the 2022 International Health Regulations Joint External Evaluation, and the 2024 International Health Regulations–Performance of Veterinary Services National Bridging Workshop.

He further described how a two-day national consultative workshop held in July 2025 reviewed lessons learned from the COVID-19 pandemic, assessed existing preparedness mechanisms, and identified priorities for strengthening national readiness. Key recommendations included establishing collaborative surveillance through an integrated National Alert and Response Framework to improve signal detection, verification and timely response. Community protection was emphasised, particularly the need for clearly defined roles and responsibilities for state and non-state actors in risk communication, and

the use of local languages and culturally appropriate approaches. Clinical care and access to countermeasures were prioritised, with a focus on expanding critical care capacity in rural and underserved areas. Regular SimExs and drills were recommended to strengthen pandemic readiness for triage, referral and case management.

He noted that the revised plan will consolidate previously separate sectoral plans into a single integrated framework and will undergo further technical consultations prior to formal adoption. The revised plan aims to institutionalise pandemic preparedness within routine public health systems.

15.4 Plenary Session III: Review of the Proposed Regional Roadmap and Action Framework for PRET Implementation

Introduction to the SEAR Regional Roadmap on Health Security and Its Alignment with Preparedness and Response to Biological Hazards (Respiratory Pathogens): Dr Pushpa Ranjan Wijesinghe, Programme Area Manager (IHM), WHO Health Emergencies Programme, WHO SEARO

Dr Pushpa Ranjan Wijesinghe presented an introduction to the SEAR Regional Roadmap on Health Security and its alignment with preparedness and response to biological hazards. He explained that the COVID-19 pandemic exposed gaps in preparedness across the WHO South-East Asia Region, highlighting the urgent need for coordinated and regionally harmonised approaches to health security. At the Seventy-fourth Session of the WHO Regional Committee for South-East Asia in 2021, Member States recognised the need for sustained investment in emergency preparedness and resilience, as well as a structured roadmap to guide national and regional actions.

He added that the SEAR Regional Roadmap on Health Security and Health System Resilience was developed in response to these needs to protect populations and economies from public health threats. The roadmap focuses on safeguarding lives and livelihoods through strengthened national and regional health security systems, improved governance and multisectoral collaboration. It guides countries in anticipating, preventing and managing health emergencies while maintaining essential health services, with an emphasis on strengthening core capacities for preparedness, readiness and resilience, and supporting operational response and regional and global coordination.

Dr Wijesinghe further noted that operationalising respiratory pathogen preparedness in SEAR involves aligning national plans with the PRET framework. Countries have conducted multi-country SimExs, webinars, roadshows and technical meetings to adopt scalable, transmission-based approaches across respiratory, vector-borne, food- and water-borne, and zoonotic pathways. COVID-19 Intra-Action Reviews revealed that disease-specific plans were inadequate and, in some instances, delayed the response. PRET addresses these gaps by institutionalising core capacities in surveillance, infection prevention and control, clinical surge management, and risk communication and other relevant areas across multiple respiratory threats.

He reiterated that the PRET approach also strengthens community engagement by framing risk communication around modes of transmission, thereby encouraging

consistent protective behaviours. Standardised readiness indicators support cross-country comparability and peer review under the International Health Regulations (2005). Importantly, PRET embeds continuous learning cycles through a plan-test-learn-adapt approach, thereby strengthening system resilience.

Dr Wijesinghe noted that the SEAR Regional Roadmap highlights that standalone disease-specific preparedness plans are no longer sufficient. Preparedness must be scalable, multisectoral, community-centred and embedded within national health security systems, guided by lessons learned from the COVID-19 pandemic and aligned with the regional roadmap to strengthen preparedness, response and recovery across the Region.

Learnings from COVID-19 Intra-Action Reviews and the Need for a Regional Roadmap: Dr Rajan Bikram Rayamajhi, Technical Officer (GOARN), WHO Health Emergencies Programme, WHO SEARO

Dr Rajan Bikram Rayamajhi highlighted lessons from COVID-19 Intra-Action Reviews, demonstrating that preparedness and response capacities must be institutionalised as core public health functions. The reviews identified inconsistent continuity of essential health services, significant disruptions to non-COVID-19 programmes, insufficient cross-border collaboration, and delays associated with the development of additional response plans due to the limited adaptability of disease-specific systems. Existing preparedness plans were generally not scalable to the transmission dynamics of SARS-CoV-2, resulting in delays in the implementation of early response measures.

He pointed out that the Intra-Action Reviews highlighted the need for decentralised coordination, effective rostering and training of surge personnel, and a stronger operational focus on the implementation of preparedness and response actions. In response, the Regional Strategic Roadmap on Health Security and Health System Resilience 2023-2027 was developed to protect populations and economies in SEAR, strengthen national and regional health security, maintain essential health services, and enhance governance and multisectoral collaboration.

Dr Rayamajhi explained that the roadmap strengthens core health security systems for preparedness, readiness and resilience, provides guidance for operational response, and aligns regional and global initiatives. PRET addresses gaps exposed by the COVID-19 pandemic by shifting from disease-specific plans to transmission-based modules. This enables the rapid activation of operational capacities such as surveillance, infection prevention and control, clinical surge management, and risk communication; improves adaptation to novel pathogens; enhances community understanding of transmission; facilitates regional comparability; and institutionalises continuous readiness within health system strengthening.

He further added that preparedness and response planning must transition from standalone, disease-specific approaches to scalable, transmission-based systems that are built on national health security frameworks, guided by the Regional Roadmap, and informed by lessons learned from COVID-19 Intra-Action Reviews.

Regional Roadmap for the Implementation of PRET-aligned National Respiratory Pathogen Pandemic Preparedness and Response Plans (NRPPRs): Dr Shambhavi Rao, Temporary Adviser, WHE, WHO SEARO

Dr Shambhavi Rao outlined the development of a Regional Roadmap for PRET-aligned National Respiratory Pathogen Pandemic Preparedness and Response Plans (NRPPRs) in the WHO SEAR. The roadmap addresses gaps exposed by previous epidemics and the COVID-19 pandemic, emphasising that preparedness must be embedded within health systems, operationalised, and continuously updated to enable a timely and effective response.

In her presentation, she explained that the roadmap was developed to address gaps exposed by previous epidemics, particularly the COVID-19 pandemic, which highlighted the need for preparedness before a crisis rather than reactive planning. Member States required tested and operational plans to enable faster action, improved coordination and better protection of lives. The vision of the roadmap is for all Member States in WHO SEAR to have fully developed, operationalised and regularly tested PRET-based respiratory pathogen pandemic preparedness and response plans at national and subnational levels.

She explained that the draft roadmap is organised into four thematic areas with corresponding strategic objectives, broadly covering integration within national health security frameworks, the establishment of effective governance mechanisms, coordinated implementation at national and subnational levels, and the strengthening of core capacities and workforce readiness.

She further noted that the roadmap encourages Member States to assess the relevance of its objectives within their national contexts, identify key enablers and bottlenecks, and define immediate operational actions. Through active engagement, country ownership and sustained collaboration, the roadmap seeks to transform lessons learned from past emergencies into lasting improvements, ensuring that the WHO SEAR is coordinated, resilient and prepared to respond to respiratory pathogen threats by 2031.

16. Concluding Session

With the successful completion of the presentations under these three plenary sessions, the formal proceedings for Day 3 of the meeting were concluded. The Chairperson thanked all presenters and participants for their active engagement and valuable contributions to the discussions and invited participants to reconvene for Day 4, which would focus primarily on facilitated group work. He informed participants that the Day 4 sessions would be centred on Member States consultations on the draft Regional Roadmap for the implementation of PRET in SEAR, with the aim of translating strategic priorities into concrete and actionable steps at the regional and country levels.

Day 4: 30 October 2025

At the commencement of Day 4, the rapporteur, Prof. Nuwan Wickramasinghe, presented a detailed summary of the proceedings of Day 3. Similar to Day 2, he provided participants with a structured overview of the key presentations, highlighting the main messages and discussion points. As Day 4 was primarily dedicated to Member States consultations on the draft Roadmap for the implementation of PRET in SEAR, this recap enabled participants to refresh their understanding of the key components of the draft Roadmap.

17. Group Work I: Consultations on Vision, Goal, Strategic Objectives and Pillars of the Roadmap for the Implementation of PRET in SEAR

Dr Ashok Basnet presented an overview of the planned group work sessions, clearly outlining their purpose, structure and expected outputs. He explained that participants would be divided into four country groups to facilitate focused and interactive discussions, with each group supported by a designated facilitator to guide deliberations and ensure effective engagement. The objective of the first group work session was to consult on the vision, goal, strategic objectives and pillars of the roadmap for the implementation of the PRET based influenza and other respiratory pathogen pandemic preparedness response plans in SEAR.

The group composition was as follows:

- India and Maldives | Facilitator: Dr Saugat Shresth
- Bangladesh and Timor-Leste | Facilitator: Dr Rajan Bikram Rayamajhi
- Thailand, Myanmar and DPR Korea | Facilitator: Dr Ashok Basnet
- Sri Lanka and Bhutan | Facilitator: Prof Nuwan Wickramasinghe
- Nepal (virtual participation) | Facilitator: Dr Haytham Mohamed

This grouping was intended to promote balanced representation, encourage cross-country learning and ensure effective participation through manageable group sizes

Participants were requested to review the draft vision, goal, thematic areas and strategic objectives from the perspectives of governance, policymaking, implementation and advocacy, with the aim of ensuring that the PRET approach is practical, scalable and aligned with existing national and regional systems and mechanisms. Each group was asked to review the draft text and accompanying visual materials and to propose revisions to enhance comprehensiveness, coherence and operational clarity.

All comments and recommendations were well received and acknowledged as important contributions to strengthening the clarity, coherence and operational relevance of the roadmap. It was noted that these inputs would be carefully reviewed and considered during the refinement and updating of the draft Roadmap, ensuring that it accurately reflects regional priorities and supports the effective implementation of the PRET approach across SEAR.

18. Group Work II: Consultation on the Strategic Action Framework for the Implementation of PRET based influenza and other respiratory pathogen pandemic planning in SEAR

A second group work session was subsequently conducted, focusing on consultations on the Strategic Action Framework for the implementation of PRET based respiratory pathogen pandemic planning in SEAR. This session followed the same group composition and facilitation arrangements as the first group work session. Dr Shambhavi Rao provided clear guidance on the conduct of the session, outlining the discussion process, expectations and objectives. Participants were guided to critically review the proposed strategic actions and provide inputs to ensure that the recommendations were practical, contextually appropriate and aligned with regional and national preparedness and response priorities.

As with the first group work session, the presentations from the second group work session were moderated by Dr Pushpa Ranjan Wijesinghe, who guided the deliberations and ensured that feedback from all groups was systematically captured. Similarly, the discussions generated a broad range of substantive and forward-looking inputs, drawing on diverse country experiences. These contributions were particularly valuable in identifying priority action areas and practical elements to be incorporated into the Strategic Action Framework.

The feedback and recommendations from Member States were well received and recognised as critical contributions to enhancing the robustness, feasibility and operational focus of the roadmap. It was agreed that these inputs would be carefully synthesised and used to further refine and strengthen the draft Roadmap, ensuring that it is responsive to regional needs and effectively supports the coordinated implementation of the PRET based respiratory pathogen pandemic planning approach across SEAR.

19. Concluding Session

Group I: Summary of Priority Strategic Objectives and Pillars of the Roadmap for the Implementation of PRET-aligned Respiratory Pathogen Pandemic Preparedness and Response Planning in SEAR: Dr Oluwatosin Akande, Technical Officer, Epidemic and Pandemic Management Department, WHO Headquarters

The summary of the first group work session was presented by Dr Oluwatosin Akande. The presentation highlighted the key strengths of the roadmap, noting that it adopts a whole-of-government and whole-of-society approach and comprehensively addresses all critical aspects of pandemic preparedness and response planning. The inclusion of a defined implementation timeline was also recognised as a positive feature, as it supports planning, monitoring and accountability.

Participants provided several overarching recommendations to further strengthen the roadmap. It was suggested that the vision and goal statements be made more concise and precise, with clearer use of key terms such as pandemic preparedness, a risk-based approach and consistent terminology relating to pathogens and viruses. Further alignment with the South-East Asia Regional Health Security Strategy and the amended International Health Regulations (2005) was recommended. Clarification was also sought on the intended scope of the roadmap, particularly whether it applies specifically to epidemics and pandemics or more broadly to all public health emergencies. In addition, participants suggested the use of active verbs to strengthen the action-oriented nature of the document.

About the thematic areas, participants emphasised the need for stronger alignment with NAPHS and the regional health security framework. They noted that the objectives should be SMART and clearly tailored to relevant stakeholders, with explicit clarification of roles and responsibilities. Further refinement of the strategic objectives was recommended, including the consolidation of overlapping objectives, reordering to improve logical flow, and clearer differentiation between the concepts of resilience and readiness, as well as between alignment and integration. Participants also highlighted the need to acknowledge the differing stages of national plan development across countries.

Several gaps were also identified. These included the absence of a clearly defined coordination structure and committee composition for overseeing PRET based respiratory pathogen pandemic preparedness and response planning implementation, limited involvement of civil society organisations, the need for an annex compiling relevant technical resources, and a clearer articulation of WHO's role in supporting Member States to implement the roadmap.

Group Work II: Summary of proposed activities for action framework for implementing PRET in SEAR: Dr Saugat Shrestha, National Professional Officer, Infectious Hazard Management (IHM), WHO Country Office, Nepal

The summary points of the first group work presentation were presented by Dr Saugat Shrestha. Across the objectives, participants emphasised the importance of embedding PRET based influenza and other respiratory pathogen pandemic preparedness and response planning and implementation within existing NAPHS or equivalent all-hazards preparedness and response plans, aligned with regional and global health security frameworks. Strong convergence was noted on the need to streamline and rationalise the framework, with several groups recommending consolidation into fewer thematic areas and a reduced number of strategic objectives to improve clarity, coherence, and feasibility of implementation.

As noted above, the key cross-cutting recommendations included refining terminology to ensure consistency and conceptual clarity, particularly replacing the term 'resilience' with 'readiness' where appropriate, removing the term 'scalable', and using action-oriented language. Participants also suggested reordering and consolidating

strategic objectives to improve logical flow, avoid duplication, and refer collectively to IHR core capacities rather than listing individual components. Greater emphasis was placed on aligning PRET-based NRPPRPs with existing governance, financing, accountability, and monitoring and evaluation systems.

Operational recommendations highlighted the need for regular field testing, updating and validation of PRET-based influenza and other respiratory pathogen pandemic preparedness and response plans through SimExs, intra-action reviews, after-action reviews, and structured learning from real events. Strengthening multisectoral coordination was prioritised, with clear articulation of roles and responsibilities across national and subnational levels, supported by steering committees, technical advisory groups and regular coordination platforms. Workforce-related actions focused on the systematic identification, training and retention of a multidisciplinary workforce, including human resource deployment planning, integration of Field Epidemiology Training Programme concepts into curricula, standardised training packages and continuous professional development through partnerships.

Participants also highlighted the importance of strengthening collaborative surveillance, laboratory networks, clinical care pathways, RCCE and recovery planning, while institutionalising learning, research, modelling and innovation to inform adaptive policies and evidence-based decision-making. Overall, the discussions highlighted the need for a streamlined, coordinated and readiness-focused Action Framework for implementing PRET based respiratory pathogen pandemic preparedness and response planning in SEAR that is firmly anchored within existing national systems and capacities.

Conclusion of the PRET Component and the Regional Meeting on PIP-PC and PRET Implementation in SEAR

Following the concluding session, the Chair and Co-Chair formally handed over the proceedings to the WHO Secretariat. Dr Pushpa Ranjan Wijesinghe provided a succinct and comprehensive summary of the four days of deliberations, highlighting the key discussions, outcomes and consensus reached throughout the meeting. He expressed his sincere appreciation and gratitude to all participants, including representatives from PIP-PC recipient Member States, the PIP Secretariat at WHO Headquarters, regional and country office focal points, members of the PIP-PC Advisory Group, academia, representatives of centres of excellence, and other partner organisations, for their active engagement, insightful contributions and constructive dialogue, which greatly enhanced the quality, relevance and impact of the discussions.

Annexure

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The WHO Regional Office for South-East Asia convened the Annual Regional Meeting on Pandemic Influenza Preparedness (PIP) Partnership Contribution (PIP-PC) and WHO's Preparedness and Resilience for Emerging Threats (PRET) Implementation in SEAR from 27-30 October 2025 in Colombo, Sri Lanka. The meeting brought together Member States, WHO headquarters, regional and country offices, the PIP Secretariat, the PIP Advisory Group, academia and technical partners to review progress in influenza pandemic preparedness and broader respiratory pathogen pandemic preparedness and response planning across the Region.

The meeting comprised two components: a review of implementation of the PIP Partnership Contribution under HLIP III (2024-2030), and consultations on PRET-aligned pandemic preparedness planning. Discussions focused on surveillance, laboratory strengthening, community protection, access to medical countermeasures, regulatory readiness, Unity Studies, seasonal influenza vaccination, and development of a Regional Roadmap and Action Framework for PRET based pandemic preparedness and response planning implementation. This report presents the proceedings of the meeting and outlines key conclusions and recommendations to strengthen sustainable, integrated and operationally ready Pandemic Influenza Preparedness systems across the WHO South-East Asia Region

