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Ministry of Home Affairs
National Disaster Risk Reduction & Management Authority



Proceedings Report

4th NATIONAL DIALOGUE ON ANTICIPATORY ACTION

22-23 December 2025



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Reference

Bajracharya, R., Khadka, J., Lord, A., Sharma, R., Pokharel, D. & Gouli, M. R. (2026). 4th National Dialogue on Anticipatory Action Proceedings Report. National Disaster Risk Reduction & Management Authority (NDRRMA), Government of Nepal: Kathmandu.



FOREWORD

Nepal is exposed to a wide range of natural hazards, including floods, earthquakes, landslides, extreme rainfall, drought, glacial lake outburst floods (GLOF), landslide dammed outburst floods (LDOF), avalanches, lightning, fires, and even tornadoes. The majority of these hazards are hydro-meteorological in origin and can be forecasted using current scientific and technological capabilities. This creates a critical opportunity for Nepal to move beyond responding to disasters after they occur, toward anticipating risks and acting in advance to reduce their impacts.

In recent years, Nepal has made significant progress in strengthening its forecasting capacity. The Department of Hydrology and Meteorology (DHM) has been generating hydro-meteorological forecasts for many years, and since 2068 B.S., it has further advanced its efforts to enhance forecast accuracy and enable real-time monitoring of precipitation and flood levels in major river systems. The DHM has also worked to enhance public information products, increase awareness, and increase public trust. The events of Ashoj 2082 demonstrated how these forecasts can inform early actions, guiding coordinated efforts across institutions and reflecting Nepal's growing commitment to a whole-of-government and whole-of-society approach to disaster risk reduction and management.

This shift from reactive response to proactive anticipatory action is rooted in experience. The 2072 B.S. Gorkha earthquake underscored the importance of strong local governments in disaster management. When local institutions are empowered and equipped with risk-informed planning tools such as Local Disaster and Climate Resilience Framework (LDCRFs), anticipatory action becomes more effective and context-specific. Strengthening local governments as first responders remains essential, as they possess critical knowledge of vulnerable communities and local risk dynamics.

At the same time, important gaps in our understanding of the magnitude and frequency of these hazards must be addressed to ensure more reliable forecasts and enable more effective anticipatory action.

Data availability, spatial coverage, and real-time monitoring remain major challenges in mountainous regions, which are further exacerbated by the lack of proper mechanisms for data sharing in the case of transboundary-origin hydro-meteorological hazards. Continued investments in understanding these hazards are vital to strengthening early warning systems and anticipatory action. Furthermore, sustainable financing mechanisms—including stronger private sector engagement, disaster risk insurance, and the integration of disaster risk into national fiscal systems—will be key to sustaining anticipatory efforts.

Nepal's journey through the National Dialogue series reflects steady progress: from raising awareness on anticipatory action, to bridging science and policy, to shaping a national framework. The country now stands at a pivotal moment—moving from commitment to implementation. This momentum aligns with broader national priorities, including the Early Warnings for All (EW4All) Roadmap and sectoral initiatives addressing air pollution and forest fire management. As Nepal advances toward an action-oriented Anticipatory Action Framework, the focus must remain on practical and implementable solutions that translate knowledge into tangible outcomes for communities.

The Government of Nepal expresses its sincere appreciation to all presenters, moderators, participants, and partners whose contributions have enriched this 4th National Dialogue on Anticipatory Action and strengthened the national agenda on anticipatory action.

Together, Nepal moves forward—from preparedness to prevention, and from risk to resilience.



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Er. Dinesh Prasad Bhatt

Chief Executive

National Disaster Risk Reduction and Management
Authority

The 4th National Dialogue on Anticipatory Action

The Fourth National Dialogue on Anticipatory Action was organized by the National Disaster Risk Reduction and Management Authority (NDRRMA) through the Anticipatory Action Clinic (AA Clinic) with the support from the AA Community of Practice (COP). The event was held on 22-23 December 2025, in Lalitpur.

Nepal is recognized globally for its proactive approach to Anticipatory Action (AA). Since 2022, the country has hosted annual National Dialogues on AA, bringing together government institutions, humanitarian actors, technical experts, civil society, and the private sector. These dialogues have provided a platform to share experiences, lessons learned, and innovations. They have also facilitated discussions on challenges and successes in anticipating, preparing for, and reducing the impacts of disasters before they occur.

The Third National Dialogue, held in December 2024, marked an important step in Nepal's AA journey. It led to the creation of the AA Clinic, a dedicated anticipatory action unit, within NDRRMA in October 2024 and set the stage for developing the National AA Framework. Since its founding, the AA Clinic has acted as a technical and institutional hub for anticipatory action – working to strengthen institutional capacities and increase coordination among AA agencies while leading the development of the National AA Framework and its Five-Year Roadmap. The Clinic also aims to promote knowledge sharing and enable collaboration through workshops, dialogue platforms, and AACOP – all of which informed their efforts in organizing this recent national dialogue.

Building on the progress of previous dialogues, the **Fourth National Dialogue in 2025** focused on institutionally operationalizing anticipatory action systems within Nepal's broader approach to disaster risk management. The theme of the dialogue was *From Commitment to Action: Embedding Anticipatory Action in Nepal's Disaster Management System*, reflecting collective readiness to move from the process

of forming and calibrating AA policies to enabling practical action. With this goal in mind, the dialogue focused on a) exploring ways to operationalize the National AA Framework b) promoting harmonization of AA practices and processes, c) fostering new synergies across sectors and among AA actors, and d) developing localized approaches for anticipatory action across all levels of governance.

The Format of the Event

The Fourth National Dialogue was organized to enable both knowledge sharing from a range of institutional partners and substantive dialogue on key challenges and opportunities. The Dialogue was oriented around two plenary sessions focusing on the National Anticipatory Action (AA) Framework and National Roadmap for Early Warning for All, respectively, as well as a series of keynote speeches focused on key challenges and priorities in advancing Anticipatory Action policy and practice in Nepal.

The plenary and keynote sessions were complemented by eight thematic parallel sessions that enabled in-depth technical discussions, experience sharing, and cross-sector learning. Cross-cutting sessions were also integrated throughout both days of the dialogue through lightning talks, providing a platform for participants to share their Anticipatory Action experiences and practices. Creative engagement spaces were also established through a marketplace and booths featuring posters, videos, IEC materials, product launches, live demonstrations, and other interactive displays. These spaces were designed to promote networking, peer learning, and the showcasing of innovative practices in Anticipatory Action (AA).

The event was bookended by a set of opening and closing remarks delivered by senior Government of Nepal officials, representatives from selected non-governmental institutions, and the event's organizing

team. These remarks helped set the stage, frame the evolution of anticipatory action in Nepal, reaffirm collective commitments, and highlight next steps.

The Fourth National Dialogue was attended by a total of 131 people, including 78 male and 53 female. The event saw strong representation from governments at the federal, provincial, and local levels, as well as from

ministries, development partners, UN agencies, Red Cross and Red Crescent Movement, I/NGOs, media, academia, and the private sector. Many parts of the event was also livestreamed online via the NDRRMA's social media outlets which made the event accessible to a broader public audience.



This report captures key issues discussed, lessons learned, and novel insights that emerged during the National Dialogue, identifying key takeaways and summarizing implications for AA policy and practice that will help AA stakeholders chart a way forward in Nepal.

OPENING CEREMONY & REMARKS

Date: 22 Dec 2025 | **Time:** 9:30 - 10:30

Moderator: Ranjana Shrestha, Communication Specialist, NDRRMA

Speakers:

- Om Prakash Aryal, Honorable Home Minister, MoHA
- Er. Dinesh Prasad Bhatt, Chief Executive, NDRRMA
- Amrit Shrestha, Joint Secretary, NDRRMA
- Hanaa Singer- Hamdy, UN Resident Coordinator in Nepal
- Riyaz Lodhi, Country Director, WFP Nepal
- Buddhi Sagar Shrestha, Director, Nepal Red Cross Society
- Arun Bhakta Shrestha, Senior Advisor, ICIMOD
- S.P. Kalaunee, Chair, AIN Chair

The Opening Ceremony of the Fourth National Dialogue included high-level speeches. Participants were also welcomed with the launch of a video by NDRRMA highlighting NDRRMA's anticipatory action efforts during the October 2025 heavy rainfall. The participation of high-level representatives showcased the strong importance placed on Anticipatory Action by the Government of Nepal, UN agencies, members of the Red Cross and Red Crescent (RCRC) Movement, and key partners.

Mr. Amrit Shrestha,

Joint Secretary, National Disaster Risk Reduction and Management Authority (NDRRMA)

Mr. Amrit Shrestha welcomed the participants on behalf of the NDRRMA and highlighted the program as an important forum for both learning and policy dialogue, emphasizing the value of sharing experiences and reflecting on achievements while discussing how AA is shaped by policies at different levels. He underscored the need to strengthen disaster preparedness, enable timely early action, ensure effective relief, and advance shock-responsive social protection systems. The speech also stressed the importance of enhancing coordination between humanitarian agencies and government institutions, with a focus on reinforcing the structural framework for disaster risk management. Mr. Shrestha concluded by noting that the recommendations emerging from the discussions would be instrumental in shaping future policy development and in fostering a common vision for more resilient and responsive systems.



Mr. SP Kalaunee,

Chairman, Association of International NGO (AIN)



Mr. S.P. Kalaunee emphasized that anticipatory action is no longer a choice but a necessity – particularly in Nepal, where the increasing frequency and unpredictability of hazards such as floods, landslides, heatwaves, fires, and glacial lake outburst floods

disproportionately affect the poorest and most marginalized communities. He acknowledged the progress made by Nepal in strengthening early warning systems under the leadership of NDRRMA and noted both ongoing piloting of forecast-based planning and the growing shift toward risk-informed planning across all three tiers of government. He stressed the urgent need to accelerate efforts in three key areas: a) ensuring predictable and flexible financing for anticipatory action, b) further localizing preparedness and response so that they are locally led, and c) strengthening data coordination and sharing mechanisms among government institutions and development partners, particularly in relation to sensitive data. He also highlighted the importance of integrating anticipatory action into national development planning processes. Mr. Kalaunee shared that INGOs allocate 1% of their total project funds for disaster response and reaffirmed AIN’s commitment to supporting the Government of Nepal in building a future where disasters are anticipated in a timely manner, impacts are reduced, communities are better prepared, and support reaches those in need promptly, ultimately contributing to the protection of lives and livelihoods.

Dr. Arun Bhakta Shrestha,

Senior Advisor, International Centre for Integrated Mountain Development (ICIMOD)



Dr. Arun Bhakta Shrestha emphasized that “better preparedness means having the capacity to anticipate likely hazards and act with confidence before impact unfolds.” He noted that anticipatory action in Nepal is moving from experimentation toward institutionalization, highlighting progress marked by the establishment of a dedicated Anticipatory Action unit within NDRRMA and the launch of the National AA Framework, which clarifies roles and supports scaling across sectors and levels of government. Referring to [the Hindu Kush Himalaya DRR Hub 2025 Declaration](#), which emerged from a recent event hosted by ICIMOD, he highlighted the need to bridge data with decision-making, strengthen regional harmonization of early warning systems, and ensure that anticipatory action is inclusive and supported by predictable financing. He concluded by stressing that the effectiveness of this dialogue will ultimately be measured by how well discussions translate into concrete early actions, institutional accountability, and sustained implementation.

Mr. Buddhi Sagar Shrestha,

Director, Nepal Red Cross Society (NRCS)

Mr. Buddhi Sagar Shrestha, briefed participants on the five resolutions adopted at the [34th International Conference of the Red Cross and Red Crescent](#), held in October 2024.¹ He emphasized two resolutions of particular relevance to Nepal: anticipatory action and the use of artificial intelligence in the humanitarian sector. Mr. Shrestha stressed the importance of demystifying AA by not just considering it in the form of monetary terms but rather regarding it as a holistic system. He noted regional forecasts as a crucial element of AA, since disasters do not have boundaries. He urged the necessity of AA at the local level and presented on the status of selected DRR chapters that have been formed as humanitarian hubs in all the 753 municipal units. He also shared a challenging experience of the Red Cross Society during the Maoist insurgency, when a cholera outbreak in Jajarkot made it difficult for other institutions to respond. This situation underscored the importance of anticipatory planning and proactive monitoring in public health emergencies, highlighting how early

¹ The resolutions broadly addressed international humanitarian law, digital and climate-related humanitarian risks, disaster risk governance, and locally led humanitarian action.



action mechanisms can save lives when conventional response channels are limited or inaccessible. Linking to that he concluded his remarks by urging government, civil societies and other institutions to acknowledge and help keep the organization impartial.

Mr. Riyaz Lodhi, Country Director,

World Food Programme (WFP) Nepal

Mr. Lodhi emphasized the importance of AA dialogue in bringing together government, diverse humanitarian organizations and development partners to strengthen collaboration and advance AA. Mr. Lodhi urged the Nepal government to rethink and reflect AA as it stands as a testament to a new change. He highlighted the paradigm shift brought by AA for early warning and appreciated the efforts to bring these changes. Despite that he also suggested being aware of chronic challenges that hinder effective AA implementation and applying suitable measures to cater for and mitigate them – such as a) failed triggers, b) extremely short or inadequate lead time, c) delays in financing, and d) lack of sufficient data. He concluded by saying “These challenges remind me that AA is a continuous process. We must learn from both success and obstacles. Looking ahead, our ambitions should be clear, and AA should be routine, predictable and nationally owned - triggered



by science, financed in advance and implemented by building on and strengthening existing systems, rather than creating parallel mechanisms”.

Ms. Hanaa Singer- Hamdy,

UN Resident Coordinator in Nepal (UNRCO)



Nepal’s UN Resident Coordinator, Ms. Hanaa Singer-Hamdy emphasized that Nepal is at a decisive moment

as it advances its National AA Framework and 5-year EW4All Roadmap (2026–2030). She stressed that this dialogue is not about policy papers, but about changing decision-making so that “warnings, triggers and immediate actions are moved early to ensure families are protected before harm.” She highlighted the shift from reacting to hazards to anticipating risks and from managing losses to protecting lives and dignity. On why AA matters now, she said, “When risks are predictable, early action becomes a responsibility.” She noted how AA turns forecasts into protection and saves lives, as in the case of Kagbeni, Mustang (13 August 2023), early warnings enabled timely evacuation and prevented fatalities. This event showed that disasters were not only about hazards, but they were also about the decisions made and the time available to act. Ms. Singer-Hamdy also emphasized priorities for the roadmap: unified trigger architecture, pre-arranged financing, local action plans, improved data and lead times, and continuous learning and accountability. She concluded with the assertion that “AA is what ensures early warning leads to protection.”

Mr. Om Prakash Aryal,

Home Minister, Ministry of Home Affairs (MoHA)



Serving as a chief guest for the event, Home Minister Aryal welcomed participants to the Fourth National Dialogue on Anticipatory Action and expressed his pleasure at joining this NDRRMA led-event. He emphasized Nepal’s high exposure to multiple hazards - including floods, landslides, drought, fires, lightning, heatwaves, cold waves, and epidemics – and noted that

“climate change has made these risks more uncertain, more intense, and more frequent.”

Speaking on behalf of the Ministry of Home Affairs, he highlighted ways in which Nepal is moving from reactive disaster management to a system based on risk knowledge, preparedness, and forecast-based anticipatory action. He also highlighted progress and advances in science and technology that increasingly allow hydro-meteorological hazards to be anticipated, enabling action before disasters strike. Mr. Aryal acknowledged NDRRMA’s leadership in institutionalizing anticipatory action, coordinating across agencies, and operating multi-hazard early warning systems. Referring to October 2025 rainfall that increased flood and landslide risk, he noted that, “timely government preparations and coordination saved lives and prevented major damage.”

Looking ahead, Minister Aryal outlined three critical elements for effectiveness: clear risk information, reliable forecasts, and impact-based early warnings; a clear action plan to follow immediately after warnings; and pre-arranged resources to act without delay. Concluding, he reaffirmed the Government of Nepal’s commitment to strengthening anticipatory action and expressed confidence that the two-day dialogue would foster new learning, ideas, and collaboration to reduce long-term human and material losses from disasters.

Er. Dinesh Prasad Bhatt,

Chief Executive, National Disaster Risk Reduction and Management Authority (NDRRMA)

Offering the final set of remarks in the opening session, NDRRMA Chief Executive Er. Dinesh Prasad Bhatt highlighted a broader shift in Nepal from reactive disaster response to proactive action, coordinated across sectors. He began by reviewing the broad gamut of hazards that Nepal faces including floods, earthquakes, extreme rainfall, drought, cloudbursts, glacial lake outburst floods, fires, landslides, avalanches, lightning, and tornadoes. Tracing the evolution of weather forecasting in Nepal since 2068 BS, he emphasized that Nepal's major rivers now have real-time data and monitoring and that public trust in forecasts has improved. At the same time, he identified gaps in real-time data in mountain regions and emphasized the need for transboundary data sharing.

On forecast-based anticipatory action, he suggested that a large majority of hydro-meteorological hazards could be anticipated with today's scientific tools, while acknowledging that existing systems still require improvements. He emphasized that improving forecast accuracy remains the most important priority. Highlighting the Government of Nepal's response to recent events in October 2025 (Asoj 2082), he reiterated how DHM forecasts guided NDRRMA's efforts, reflecting a "whole government, whole society approach."

Chief Executive Bhatt stated that "if local government is strong, anticipatory action becomes easier and more effective." He urged the development of climate-resilient local plans, including Local Disaster



Climate Resilience Plans (LDCRPs), to strengthen preparedness and response at the community level. CE Bhatt highlighted the NDRRMA's ongoing work on early warning systems, forest fire management, and post-earthquake reconstruction in Jajarkot. That said, he identified chronic gaps in real-time data in mountain regions and emphasized the need for transboundary data sharing, made apparent by recent events like glacial floods in Rasuwa district. He concluded with a call to action for the National AA Framework: "let's make it action-oriented (महाभारत बनाउने होइन, गीता बनाउने हो)" emphasizing practical, implementable solutions.

PLENARY SESSIONS

The Plenary Sessions of the Fourth National Dialogue featured an in-depth technical discussion on two recently drafted national documents: 1. National Anticipatory Action Framework and 2) The Early Warning for All Roadmap. Discussions in these sessions focused on the mainstreaming and financing mechanism for these plans, the need for alignment between AA and EWS, inter-pillar connectivity within EW4All, and institutionalization and operationalization of these frameworks across three tiers of government. These plenary sessions were organized and facilitated by Reena Bajracharya, Technical Coordinator of the NDRRMA's AA Clinic, and Sunil Bogati from WFP Nepal.



1. National AA Framework Operationalization and the Roll out of the Five-Year Roadmap

Date: 22 December 2025 | **Duration:** 1.5 hours

Moderator: Mr. Bamshi Acharya, Governance and Political Economy Expert

Presenter: Mr. Rajendra Sharma, Under Secretary (Technical), NDRRMA

Panellists:

- Ms. Bibhuti Pokharel, Senior Divisional Meteorologist, Department of Hydrology and Meteorology (DHM)
- Mr. Bishwo Raj Neupane, Ministry of Home Affairs (MoHA)
- Mr. Sumit Dugar, Foreign, Commonwealth & Development Office (FCDO)
- Ms. Sanchita Neupane, People in Need (PIN)

Background / Context:

Anticipatory Action (AA) in Nepal began in 2015 through flood-focused pilot initiatives and has since evolved into a broader shift toward forecast-based disaster preparedness. Traditional Disaster Preparedness and Response Plans (DPRPs) primarily guide action once hazards are imminent or have already occurred, limiting opportunities to reduce losses.

To address this gap, the Government of Nepal, under the leadership of NDRRMA, has developed the National Anticipatory Action Framework and a Five-Year Roadmap to transition from reactive disaster response to proactive, forecast-based early action. A national Community of Practice, comprising over

30 organizations, has been established to provide technical support and advocate for AA across sectors and platforms.

The operationalization of the Framework is grounded in existing legal and policy instruments, including the Disaster Risk Reduction and Management Act, Disaster-Sensitive Social Security and Relief Distribution Standards, and Disaster Management Fund Guidelines. Pilot initiatives in selected municipalities have demonstrated the feasibility of forecast-based early action. The Framework is also aligned with the Early Warnings for All (EW4All) roadmap to ensure coherence, coordination, and avoidance of duplication.



This session presented the draft National AA Framework, followed by a panel discussion on its operationalization, challenges, and priorities for implementation across federal, provincial, and local levels.

Rajendra Sharma, Under Secretary (Technical), NDRRMA: “The Framework focuses on translating early warnings into timely, actionable measures across all levels of government, integrating scientific forecasts with local knowledge, and ensuring gender-sensitive and inclusive implementation.”

Key Issues Discussed

Rationale for a National Anticipatory Action Framework:

Panellists highlighted the limitations of conventional DPRPs, which largely focus on response after hazards occur. The October 2025 monsoon event was cited as a positive example, demonstrating how timely forecasts

from DHM, advisories from MoHA and NDRRMA, and coordinated early actions across levels of government can significantly reduce losses.

The National AA Framework and Five-Year Roadmap were emphasized as essential tools to institutionalize such practices, clarify roles and responsibilities, and translate early warnings into timely, actionable measures—despite ongoing capacity constraints at the local level.

Ganesh Chaudhary, Mayor, Janaki Rural Municipality: “Community participation is essential for sustainable interventions. Working alone is not sufficient. Collective action and collaboration are essential.”

Role of Security in Field-Level Operationalization:

Panellists underscored the critical role of security agencies in enabling anticipatory action, particularly during high-risk periods. Effective coordination among MoHA, NDRRMA, security forces, and local governments was identified as essential for timely implementation of early actions. Security agencies play a vital role in logistics support, access to high-risk and remote areas, and coordination during preparedness and early action phases.

Scope of Anticipatory Action beyond Cash Transfers:

The discussion clarified that anticipatory action extends well beyond cash-based interventions. The National AA Framework identifies 14 early action activities across seven categories, including pre-positioning, stockpiling, standby arrangements, and

awareness measures. Conditional cash transfers were recognized as one component within a broader package of anticipatory actions, rather than the sole or primary intervention.

From Forecasts to Action: Technical Capacity and Risk Communication:

Panellists acknowledged significant progress by DHM in producing forecasts for floods, heavy rainfall, and heat waves, with ongoing efforts to advance Impact-Based Forecasting (IBF). However, challenges remain in translating centralized forecasts into localized, actionable information that municipalities can use for decisions such as evacuation and early preparedness.

Participants emphasized the need to integrate local knowledge, indigenous anticipatory practices, and community-level communication channels to ensure forecasts lead to timely and appropriate action on the ground.

Bibhuti Pokharel, DHM, stated: “The most important thing is to move from forecast to action. Actions are scattered, and we need to channelize them effectively from the central level.”

Operational Challenges at Provincial and Local Levels:

Unclear roles, accountability gaps, and limited operational guidance across federal, provincial, and local governments were identified as persistent barriers to timely early action. While forecasts are increasingly available, local authorities often struggle to act due to the absence of localized thresholds, agreed triggers, and clearly defined responsibilities.

Panellists stressed the importance of clarifying how anticipatory action integrates with existing response frameworks, strengthening district-level coordination—particularly the role of Chief District Officers—and ensuring inclusive, bottom-up engagement. The National AA Framework was highlighted as a key mechanism to address these gaps by strengthening preparedness measures such as standby arrangements, stockpiling, and awareness activities.

Sanchita Neupane, PIN: “There is a need to shift communities from passive beneficiaries to active participants in early action. This shift not only empowers them but also enhances their dignity and confidence.”

Financing Forecast-Based Early Action:

Pre-arranged and predictable financing was identified as a cornerstone of effective anticipatory action. Panellists emphasized that success should be measured by the extent to which resources are mobilized and used

before disasters occur, rather than through post-disaster humanitarian response.

While government financing mechanisms exist, participants highlighted the need for clearer operational guidance to ensure rapid access to funds at provincial and local levels.

Sumit Dugar, FCDO: “Measuring success should focus on how much funding is used for forecast-based early action rather than post-disaster humanitarian aid.”

Policy Development and Legal Instruments:

Panellists reflected on improved policy clarity around anticipatory action over the past four years, while noting that gaps in ownership, transparency, and accountability continue to limit effectiveness. Existing legal instruments provide a foundation for AA, but further amendments and context-specific adaptation are

required to strengthen implementation at subnational levels.

Gender-sensitive and inclusive approaches, empowered communities, alignment with the EW4All roadmap, and robust mechanisms for monitoring, learning, and adaptation were highlighted as critical to sustaining long-term accountability and effectiveness.

Sumit Dugar, from FCDO, noted: “AA is a fluid concept—it can be applied to multi and multiple hazards, in various ways, and for different scenarios. This framework provides thematic guidance. However, to implement it effectively at the provincial and local levels, it must be adapted and applied in a context-specific manner.”

Recommendations / Way Forward

- Finalize and operationalize the National Anticipatory Action Framework and Five-Year Roadmap, clearly defining triggers, thresholds, and standard operating procedures for multi-hazard anticipatory action, and ensuring alignment with existing disaster response mechanisms to avoid duplication.
- Strengthen forecasting and risk communication by expanding Impact-Based Forecasting to additional hazards, localizing forecasts for municipal use, and improving last-mile dissemination through enhanced coordination between DHM and NDRRMA. Scientific forecasting should be complemented by local and indigenous knowledge.
- Clarify roles and accountability across federal, provincial, and local governments, including security agencies and district-level authorities. Guidelines should enable local governments to act autonomously while maintaining coordination with central authorities for technical and financial support.
- Prioritize a diversified package of anticipatory actions beyond cash transfers, including pre-positioning, stockpiling, standby arrangements, and awareness activities. Cash-based assistance should remain one of several tools and be mobilized efficiently through Local Disaster Management Funds.
- Enhance local technical capacity to interpret forecasts and implement early action, including guidance on required expertise, staffing, and mechanisms for continuous learning and feedback from field-level experience.
- Promote community-centered anticipatory action, transitioning communities from passive recipients to active decision-makers through inclusive, bottom-up approaches that empower vulnerable groups and integrate local priorities.
- Strengthen pre-arranged financing mechanisms by leveraging national and international instruments such as the Disaster Management Fund, CERF, Cat DDO, and Disaster Relief Emergency Fund, supported by transparent reporting and clear operational guidance.
- Review and amend policy and legal frameworks to explicitly incorporate anticipatory action, strengthening institutional ownership, accountability, and coordination among government actors and development partners.
- Establish monitoring and learning mechanisms to assess the effectiveness of forecast-based early actions, track reductions in losses, and use lessons from pilot initiatives to refine triggers, thresholds, and operational procedures while promoting knowledge sharing across all levels of government.

2. Framing AA Within the Larger EW4ALL Initiatives and the Roadmap



Date: 22 December 2025 | **Duration:** 1.5 hours

Moderator: Ms. Aarati Chataut, Deputy General Manager, PSBN

Presenter: Dr. Popular Gentle, DRR and Climate Advisor, UNRCHO

Panellists:

- Mr. Rajendra Sharma, Under Secretary (Technical), NDRRMA
- Dr. Archana Shrestha, Deputy Director General, DHM
- Mr. Bishwo Raj Neupane, Under Secretary, MoHA
- Dr. Reshma Shrestha, Associate Professor, Kathmandu University

Background / Context

The Early Warnings for All (EW4All) initiative, launched in 2022 by the United Nations Secretary-General, aims to ensure that by 2027 all people have access to people-centered, multi-hazard early warning information, in line with global commitments made at COP27. Nepal has been identified as one of 30 priority countries for EW4All implementation and has initiated the development of a national EW4All roadmap (2026–2030) through consultations with UN agencies, development partners, and stakeholders at federal, provincial, and local levels.

The EW4All roadmap provides a strategic framework for strengthening Nepal's early warning system across the four global pillars—disaster risk knowledge, observation and forecasting, warning dissemination,

and preparedness and response capabilities. Within this context, Anticipatory Action (AA) is positioned as a complementary approach that supports the effective use of early warning information by enabling timely preparedness and preventive measures, particularly at the local and community levels.

This session focused on situating Anticipatory Action within the broader EW4All agenda, examining governance and coordination arrangements, technical and institutional gaps, community engagement, and resource need to ensure that early warnings under EW4All translate into effective and timely action on the ground. The session consisted of a presentation followed by a panel discussion, which together explored practical pathways for operationalizing anticipatory action within the EW4All framework.

Key Issues Discussed

Localizing Anticipatory Action:

Participants emphasized that anticipatory action must be locally driven, grounded in community and municipal priorities rather than centrally designed and imposed. Effective implementation requires pre-prepared work

plans, allocated budgets, and institutional readiness at the local level. Without these, early actions remain ad hoc and reactive, even when forecasts are available. National frameworks and digital platforms such as the Bipad Portal were recognized as important enablers for identifying risk hotspots, but localization remains critical for translating information into action.

Rajendra Sharma, NDRRMA: “Anticipatory Action is not something that should be designed at the centre and pushed down. It has to start from local government and community priorities.”

Advances and Challenges in Impact-Based Forecasting and Local Preparedness:

The discussion acknowledged significant progress in meteorological and hydrological forecasting, particularly the shift toward impact-based forecasting (IBF). Heavy rainfall forecasts were cited as contributing to reduced human and economic losses in areas such as Dodhara Chandani, where early warnings enabled preparedness actions. However, participants highlighted persistent challenges in converting forecasts

into clear, location-specific guidance for evacuation, mobility control, and local preparedness decisions.

Slow-onset hazards such as fog and heatwaves were identified as particularly challenging, as reliable forecasts are often available only 24 hours in advance, limiting the scope for anticipatory action. Participants stressed that beyond technical accuracy, last-mile communication and trust remain critical bottlenecks, especially in remote and vulnerable communities.

Dr. Archana Shrestha, DHM: "Impact-based forecasting (IBF) has helped reduce human and economic losses by enabling timely preparedness in response to heavy rainfall, as seen in areas like Dodhara Chandani."

Integrating Scientific Forecasts, Traditional Knowledge, and Research

Panelists highlighted the importance of combining scientific forecasts with traditional and indigenous knowledge, including agricultural practices and cultural calendars that communities use to anticipate weather patterns. A concrete example was cited from the previous year, when heavy rainfall was forecast during Dashain, but communities relied on traditional expectations of

clear weather and did not take preparedness measures, resulting in avoidable losses.

This example underscored the need for systematic validation and integration of traditional indicators within formal early warning systems. Academic institutions were identified as key actors in this process, supporting risk mapping, drone surveys, and post-disaster studies to identify hazard patterns and vulnerable areas.

Dr. Reshma Shrestha, KU: “Our vision is Campus to Community. Research must reach communities and inform practical action.”

Governance, Coordination, and District-Level Mechanisms

The discussion highlighted the evolving institutional roles within Nepal’s disaster risk management system. While the Ministry of Home Affairs (MoHA) historically led disaster management, Mr. Bishwo Neupane noted that the National Disaster Risk Reduction and Management Authority (NDRRMA) now plays a central coordinating role, including implementing EW4All. Experiences from recent flood

events illustrated both progress and gaps: during the 2081 (2024) floods, early warnings were disseminated effectively, but vehicle movements were not restricted in high-risk corridors, resulting in preventable losses. Lessons from these informed anticipatory actions during the 2082 (2025) monsoon, demonstrating the value of learning-based adaptation.

At the district level, coordination through District Disaster Management Committees (DDMCs),

chaired by Chief District Officers (CDOs), remains critical. In districts like Kailali, which include several local governments, this structure ensures effective coordination and mobilization of security units. However, participants noted that DDMCs often lack

clearly defined tasks, limiting their effectiveness in anticipatory action. Panelists emphasized that governance structures must support the translation of policy into practical, community-level implementation.

Ganesh Chaudhary, Mayor, Kailali “While the DDMC exists, in many areas they do not receive meaningful work or tasks. Roles and responsibilities need clarification.”

Community Capacities and GEDSI:

Strengthening community and first-responder capacities remains a key priority. Over 1,000 volunteers have been trained, supported by volunteer-tracking software for real-time mobilization, and agreements with the Helicopter and Rafting Associations facilitate rescue operations. Despite these advances, gaps remain in gender-sensitive and inclusive practices, particularly in search and rescue and public information systems. Participants noted that current approaches often fail to adequately address the needs of pregnant and post-partum women, persons with disabilities, and other vulnerable groups. While the implementation of a GEDSI workplan was acknowledged as a positive step, further institutionalization, capacity-building, and tailored messaging are needed to ensure truly inclusive

anticipatory action.

Financing and Capacity Constraints: Participants emphasized that climate change-induced disasters are increasing in scale and frequency, while institutional and financial capacities have not kept pace. NDRRMA's limited staffing and constrained budget were highlighted as significant challenges to effective coordination and oversight. While mechanisms such as the Disaster Management Fund exist, they are insufficient to support the full scope of EW4All and anticipatory action needs.

Additional financing avenues, including the Loss and Damage Fund, Climate Funds, CAT-DDO, and public-private partnerships, were identified as necessary to address gaps in forecasting infrastructure, skilled human resources, data systems, and operational readiness.

Er. Dinesh Bhatt, CE, NDRRMA- "NDRRMA has only 38 staff members to monitor and manage disasters across the country. Limited budgets restrict our flexibility in disaster management, and we are in the process of accessing the Loss and Damage Fund to support response and recovery activities."

Recommendations / Way Forward

- Finalize EW4All Roadmap and Align with Anticipatory Action (AA) Framework. Ensure that the EW4All Roadmap and the National Framework for Anticipatory Action are coherent and complementary. Avoid duplication of efforts across pillars and institutional mandates. Conduct final validation workshops with
- Empower local governments and communities to lead early and anticipatory actions. This includes pre-prepared work plans, allocated budgets, and trained volunteers ready for deployment. Standardized training for first responders and a volunteer-tracking system should be fully operational at all local levels to ensure timely mobilization during disasters.
- Combine scientific, impact-based forecasts from DHM with indigenous knowledge, including agricultural and cultural calendars, to improve community-level response. Institutionalize mechanisms for validating and integrating traditional indicators, ensuring forecasts are locally relevant and actionable.
- Implement Gender Equality, Disability, and Social Inclusion (GEDSI) principles across warning dissemination, search and rescue, and early action planning. Develop tailored communication strategies that reach women, persons with disabilities, LGBTI communities, and other vulnerable groups to ensure equitable access to life-saving information.
- Clarify and strengthen the roles of Chief District Officers (CDOs), District Disaster Management Committees (DDMCs), municipalities, and local disaster management committees. Establish clear protocols for rapid decision-making and resource mobilization, while ensuring community-level capacities are integrated into the response structure.
- Increase Resource Mobilization for Multi-Hazard Preparedness. Leverage national, international, and private resources to complement government funding. This includes accessing the Loss and Damage Fund, Climate Fund, World Bank CAT-DDO, and public-private partnerships. Prioritize funding for high-risk areas identified through multi-hazard risk assessments and ensure transparent tracking of allocations and expenditures.
- Ensure that academic research informs policy and practical interventions at the community level. Strengthen partnerships between DHM, NDRRMA, and universities to conduct operational and innovation-focused research. Evidence-based insights should directly guide anticipatory actions, forecasting improvements, and risk communication strategies.
- Establish a systematic framework to monitor the effectiveness of anticipatory actions and EW4All implementation. Collect lessons learned from pilot programs, disaster events, and community feedback to refine future interventions. Use impact metrics to measure reductions in loss and damage, ensuring continuous improvement in preparedness and response.

PARALLEL SESSIONS

The Parallel Sessions of the Fourth National Dialogue convened key stakeholders for interactive discussions on specific dimensions of Anticipatory Action in Nepal. These sessions examined existing commitments, relevant policy provisions, chronic challenges, lessons learned, and emerging opportunities. They also identified clear pathways and actionable steps to operationalize these commitments and helped outline guiding principles to support the sustained implementation of Anticipatory Action in Nepal. The overall parallel sessions were facilitated by Reena Bajracharya, Technical Coordinator of the AA Clinic, and Sunil Bogati from WFP Nepal.



Harmonizing Triggers, Thresholds, and Targeting for AA

Date: 22 December 2025 | **Duration:** 1 hour

Moderator: Bibhuti Pokharel, Senior Meteorologist, DHM

Presenters:

- Anuj Tiwari, PIN
- Suraj Shrestha, CARE Nepal
- Man Bahadur Kshetri, WFP Nepal
- Plan International, WFP Nepal



Background/ Context

The session focused on strengthening the institutionalization of Triggers, Thresholds, and Targeting (3Ts) within Nepal's Disaster Risk Management system as a core foundation for effective anticipatory action. It emphasized the leadership roles of NDRRMA and DHM in developing a harmonized national trigger and threshold system, while highlighting how innovative practices from humanitarian partners can complement and support national frameworks. Convened by WFP with support from Plan International, the session aimed to promote institutional ownership, improve coordination, and support the integration of the 3Ts across key sectors such as agriculture, health, and social protection.

Key Issues Discussed

The session emphasized the importance of clearly distinguishing between key technical concepts used in anticipatory action. It was clarified that a threshold refers to a quantitative value of an event such as rainfall intensity or flood level, while a trigger refers to the combination of information—such as forecast source, threshold value, and targeted location—that collectively activates anticipatory action. Thresholds alone cannot initiate action; rather, they form a component of the broader trigger mechanism. It was highlighted that the harmonization of the “3Ts” (Thresholds, Triggers, and Targets) should be jointly led by NDRRMA and DHM at the national level to ensure consistency and institutional ownership.

Under the presentation by Pratibaddha (PIN), the trigger mechanism was explained as a system for determining when to act. The project utilizes both DHM's weather forecasts and local observations to activate triggers. DHM forecasts include seasonal outlooks, special bulletins, and impact-based forecasts (IBF), while local observations rely on citizen science approaches for rainfall monitoring, risk monitoring in CAT II and III zones, and environmental cues. Different forecast products correspond to different phases of action: monsoon outlook triggers the preparedness phase, special bulletin triggers the readiness phase, and IBF triggers the activation phase, with each phase linked to distinct early actions.

The presentation by CARE on the Anticipatory Action Toolkit for Heat Wave and Cold Wave introduced the use of percentile analysis to define thresholds. Very hot days were defined as those exceeding the 95th percentile of historical temperature observations, while extreme cold days were defined as those below the 1st percentile. It was noted that thresholds vary by geographic region and therefore must be determined on a location-specific basis. The toolkit also includes an automated alert note system that generates anticipatory action alerts once thresholds are reached.

The WFP presentation on localized thresholds and triggers for floods highlighted the need to establish weather-station-specific rainfall thresholds and to develop flood forecasts for flashy streams. Rainfall data must be translated into different flood scenarios to improve accuracy. The use of Intensity–Duration–Frequency (IDF) curve development procedures was proposed as a method to derive hourly rainfall estimates from 24-hour data. By combining station-based thresholds with gridded rainfall thresholds and

extreme event analysis, more precise triggers can be generated.

In the presentation on targeting methodology by Ram Hari Gaire, the use of Proxy Means Testing (PMT) was discussed as a method to estimate household welfare or poverty levels using observable characteristics. The development of a poverty scorecard was recommended to identify poor and vulnerable households for inclusion in shock responsive social protection systems. Stable welfare indicators were emphasized as essential for accurately targeting households most at risk.

Recommendations/ Way Forward

- Shift the current focus from purely meteorological thresholds to impact-based thresholds, as it is the actual impact that should trigger anticipatory action.
- Ensure that sectoral institutions such as NDRRMA and relevant line ministries (e.g., agriculture, health) take leadership in defining sector-specific impact thresholds.
- Recognize that the same hazard (e.g., rainfall) produces different impacts across sectors, such as landslides, agriculture, and public health, and therefore thresholds must be context- and sector-specific.
- Initiate systematic collection and documentation of impact data at all levels to support the development of evidence-based thresholds. Strengthen the use of consistent impact data to support Nepal's transition from hazard-based thresholds to impact-based thresholds and improve the effectiveness of anticipatory action.

Harmonizing Inclusive Early Warning and Early Action with Resource Mobilization: Institutionalization and Mainstreaming Anticipatory Action for Sustainable Resilience



Date: 22 December 2025 | **Duration:** 1hours

Moderator: Arishma Shrestha- GEDSI and Protection Manager- PIN

Panelists:

- Kalpana Kumari Katuwal- Mayor of Barahathawa- Sarlahi District, Janakpur
- Binod Parajuli- Senior Divisional Hydrologist, (DHM)
- Shakti Gurung- Vice-Chairperson, DPNet
- Dammar Sunar- Executive Director of Bheri Environmental Excellence Group

Organized by:

- People in Need, Plan International and Nepal Red Cross Society

Background/ Context

The session highlighted the critical need to institutionalize and harmonize AA and establish a cohesive and coordinated approach across the multi-tier governments. It is necessary that risk communication and anticipatory planning should be inclusive, accessible, equitable, and rooted in the community's safety and dignity. AA can be made impactful by fostering local action and indigenous knowledge. The discussion also attempted to consolidate the experiences of local governments, which are crucial to institutionalizing the forecast based on early response. One of the key priorities of the AA framework – especially at a local level- remains reaching the last mile population (the vulnerable groups) to cater the differentiated impact through equity, participation and accountability.

Key Issues Discussed

The first part of the session highlighted practices to improve access to rural areas and the challenges faced in implementing Anticipatory Action (AA) there. Taking Barahathawa municipality as an example - a settlement located in between the two rivers-the discussion shed light on how local committees have been formed to manage floods and forest fires. The focus has always remained on early preparedness, which is inclusive enough to cover all types of community groups - particularly differently abled and the most vulnerable people through a dedicated fund. Likewise, the technical aspects of early warning and the importance of reliable actions/mechanisms for local governments were also discussed. While

DHM stations and communication systems involving NGOs and INGOs are already in place, gaps remain in areas that still do not have any in-situ stations. To bridge this, weather bulletins are published, and two-way interactions are being emphasized. On the other hand, knowledge management is facilitated through the involvement of umbrella organizations like DPNet, which provide platforms for policy discussion and help in national level coordination.

The second part of the discussion focused on the integration of local and technical knowledge. Indigenous knowledge, such as observing weather situations like fog and rainfall, should be spread across the communities. There was also a significant focus on embracing GEDSI (Gender, Equality, Disability, and Social Inclusion) into the current draft of the AA framework. Similarly, a practical approach involves analyzing vulnerability conditioning factors and organizing door-to-door awareness programs, focusing pregnant women and differently abled people, so that no one is left behind.

The final part highlighted communication methods and data challenges. Since 2016, information has been disseminated via social media, SMS, IVR, and local languages (e.g., Tharu) to ensure a wider reach. Moreover, a color-coded system (Green, Yellow, Orange, Red) is also being employed to simplify risk levels. However, there are several challenges like lack

of strong databases and the need for digitalization at the local level. Despite the hurdles, activities like the involvement of female volunteers and public representatives have aided to successfully reduce casualties during the recent disasters.

Recommendations/ Way Forward

- Investing in capacity building, resource allocation, and behavioural change to strengthen the social dynamics of DRR.
- Prioritize further investment in forecast accuracy, information dissemination, and a wide outreach to all the municipal units.
- Creating DRR-specific job opportunities at the local level to ensure sustainable implementation and localization.
- Ensuring the practical implementation of GEDSI within the draft AA framework. Additionally, such a framework should be backed by clear budget assurance.
- Developing a system for multi-level warnings based on vulnerability levels (High, Moderate, and Low) rather than using generic ones.
- Improve the harmonization between early warnings and the specific actions that need to be taken by the community.

Financing and Sustainability of Anticipatory Action

Date: 22 December 2025 | **Duration:** 1 hour

Moderator: Ms Sanchita Neupane, PIN

Panelists:

- Ms Roshani Kumari Shretha, Joint Secretary, NDRRMA
- Mr. Uttam Gautam, Under Secretary, Ministry of Internal Affairs and Law, Karnali Province
- Mr. RamHari Sharma, Chairman, Nepalgunj Sub Metropolitan City, Lumbini
- Mr. Sushil Dev Subedi, Executive Director, National Insurance Authority (NIA)
- Mr. Sumit Duggar, Resilience Advisor, British Embassy, Kathmandu

Organized by:

- People in Need, UNICEF and Welthungerhilfe Nepal



Background/ Context

Nepal is highly exposed to multiple hazards, including floods, landslides, droughts, and earthquakes, which repeatedly disrupt development gains and place significant fiscal pressure on both government and communities. Anticipatory Action (AA) offers a proactive and cost-effective approach to mitigate the humanitarian and economic impacts of disasters by acting before crises fully unfold.

Ensuring the sustainability of AA at scale, however, requires reliable financing and robust risk transfer mechanisms. This session, *“Financing and Sustainability of Anticipatory Action,”* tried to explore how Nepal can strengthen disaster risk financing and institutionalize AA through effective policy frameworks, innovative financing models, and collaborative engagement among government, donors, the insurance sector, and the private sector. Drawing on experiences from federal, provincial, and local levels, the discussion highlighted both opportunities and challenges in sustaining AA, particularly in the context of declining donor funding.

The session featured a panel discussion complemented by interactive dialogue, fostering open exchanges and active engagement among stakeholders.

Key Issues Discussed

The panel examined the sustainability of financing mechanisms for Anticipatory Action (AA) in Nepal amid increasing climate change-induced disasters. Drawing lessons from major past events, including the 2072 BS (2015) earthquake, panelists reflected on the country’s readiness to finance large-scale disaster impacts and emphasized the limitations of a predominantly post-disaster response and recovery approach. The discussion highlighted the need to shift toward pre-arranged, predictable, and timely financing to reduce losses and damages.

Panelists discussed the role of disaster risk financing and risk transfer instruments, particularly insurance, as part of a broader financing ecosystem for AA. Parametric insurance was highlighted as a promising approach due to its rapid payout mechanisms triggered by predefined thresholds. While Nepal has established key policy

frameworks, including the National Disaster Risk Financing Strategy and alignment with the DRRM Act and the Sendai Framework, implementation remains constrained by low insurance penetration, limited trust in insurance systems, data gaps for damage and loss assessment, and weak linkage between insurance, early warning systems, and reconstruction processes.

Sub-national experiences from Karnali Province and Nepalgunj Sub-Metropolitan City demonstrated the potential of localized insurance pilots when supported by political commitment, dedicated budget allocations, and partnerships with insurance providers. However, the discussion underscored that awareness alone does not guarantee uptake. Structural challenges such as affordability, voluntary participation, vulnerability of traditional housing types, and uncertainty around declining international financing beyond 2025 were identified as key risks to the long-term sustainability of AA financing.

Recommendations / Way Forward

- Operationalize the National Disaster Risk Financing Strategy by strengthening coordination between federal, provincial, and local governments and embedding anticipatory financing within existing DRRM mechanisms.
- Scale up insurance and risk transfer pilots, including parametric and housing insurance, through regulatory clarity, improved data systems, and stronger linkage with early warning and forecasting.
- Encourage local governments to allocate dedicated resources for anticipatory action and integrate financing mechanisms into local DRR and development planning.
- Explore incentive-based or mandatory insurance approaches linked to housing registration, reconstruction, or access to financial services to improve coverage.
- Systematically document and institutionalize lessons from pilot initiatives to inform national-level replication and long-term sustainability of anticipatory action financing.

AA for Health-Related Emergencies

Date: 22 December 2025 | **Duration:** 1 hours

Moderator: Pramod Adhikari, NRCS / Ms. Neelam Parajuli, UNFPA

Presenter: Ms. Neelam Parajuli, UNFPA

Panelists:

- Mr. Amar Mani Poudel, NRCS
- Ms. Bandana Bhatta, Health Emergency Operation Center (HEOC)
- Mr. Mukesh Poudel, Epidemiology and Disease Control (EDCD)
- Ms. Nisha Joshi, Family Welfare Division (FWD)

Organized by:

- NRCS and UNFPA



Background/ Context

The session on Anticipatory Action (AA) for Health-Related Emergencies focused on how Nepal's draft National AA Framework integrates health risks into anticipatory planning and response. Moderated as a multi-stakeholder discussion, the session reflected on health-related hazards such as heatwaves, cold waves, epidemics, and other climate-induced and epidemiological risks. Drawing from experiences during major crises, including the COVID-19 pandemic, the 2015 Gorkha Earthquake, and recurrent floods, the session examined how health systems can transition from reactive emergency response to forecast-driven, anticipatory health action. The discussion also explored institutional mandates under the draft AA framework and the extent to which health is positioned as an operational pillar within anticipatory action in Nepal.

Key Issues Discussed

The session highlighted that the draft AA framework explicitly recognizes health risks linked to climate and epidemiological hazards and promotes a shift toward forecast-based health preparedness aimed at protecting lives and ensuring continuity of essential services. Health institutions such as the Ministry of Health and Population (MoHP), HEOC, and EDCD are envisioned as leading surveillance, alerts, and health risk monitoring, while departments such as DHS and local governments support service delivery and community mobilization. The integration of health and WASH data

into early warning and risk monitoring systems was discussed as a critical advancement, positioning health as a core operational component of anticipatory action. Practical early actions—such as activating cooling or warming centers and pre-positioning essential medical supplies were emphasized as key measures to protect vulnerable populations during extreme temperature events.

Panelists further reflected on their organizations' current roles in anticipatory and early action. Government agencies described responsibilities related to policy formulation, data collection and analysis, risk communication, service continuity, and decision-making. Humanitarian organizations, including the Red Cross, highlighted their role in advocating for the adoption of AA frameworks, supporting early action during crises, and strengthening policies and operational guidelines in coordination with national authorities such as NDRRMA.

At the same time, several gaps in the draft framework were raised. Panelists noted the absence of strong legal enforcement and clear coordination mechanisms across federal, provincial, and local levels. Limitations in cross-border data sharing, particularly relevant for disease surveillance were flagged, along with insufficient clarity on the roles and responsibilities of local governments. The framework was also described as overly generic, with a need for clearer sector-specific guidance and implementation arrangements tailored to health hazards.

Recommendations/ Way Forward

- Ensure legal backing for the finalized AA framework, with clear coordination mechanisms across all tiers of government.
- Strengthen provisions related to health hazards by clarifying cross-sector information sharing, endorsing sector-specific guidelines, and defining the roles of local governments.
- Align the AA framework with existing health emergency policies and strategies and ensure sustainable financing mechanisms for anticipatory health actions.
- Develop sector-wise specifications and implementation guidelines to operationalize the otherwise generic elements of the current draft framework.
- Incorporate measures to ensure the safety and protection of health workers during health emergencies.
- Expand the scope of prioritized health emergencies to include conditions such as sickle cell disease and human-induced hazards, including road accidents.

Shock Responsive Social Protection

Date: 23 December 2025 | **Duration:** 1 hour

Moderator: Bishwo Raj Neupane, Ministry of Home Affairs (Under Secretary)

Hemanta Dangal, SRSP Technical Working Group Co-Lead

Panelists:

- Goma Chemjong –Under Secretary, NDRRMA
- Dinesh Lama – Chairman of Roshi Rural Municipality
- Anil Sharma - Nepal Banker Association
- Haile Abera - Head of programs, WFP Nepal

Organized by:

- Save the Children, WFP Nepal, UNICEF Nepal, and Plan International



Background/Context

The session focused on the implementation and challenges of integrating social protection systems with anticipatory action frameworks to enhance disaster resilience. The discussion was based on the SRSP policy passed by the government of Nepal on Poush 16 2081, which aims to expedite relief distribution through local governments, coordinate disaster response efforts, and incorporate socio-economic and risk exposure data. Panelists discussed the effectiveness of the policy in different districts, local challenges, and the role of banking systems in facilitating relief distribution.

Key Issues Discussed

The discussion highlighted major gaps in awareness and implementation of the SRSP policy at the local

level. Findings showed that around 75 percent of local governments were not aware of the new standards, while those who were informed considered the policy a positive step. The intent to link relief assistance with social security funds was seen as a way to make relief delivery faster and more systematic once disasters occur. However, limited orientation and training on SRSP standards continue to hinder effective rollout at the local level.

The role of local governments in relief distribution was emphasized, particularly their access to public data that can support quicker identification of affected households and more efficient assistance delivery. The use of volunteers under the Prime Minister's Employment Program was discussed as a potential mechanism to strengthen local response capacity.

Despite this potential, insufficient institutional preparedness and lack of clarity on operational roles remain key constraints.

Concerns were also raised regarding the use of the banking system for cash-based relief under the SRSP policy. While banks are technically prepared to handle fund transfers, emergencies may lead to crowding and operational challenges. Immediate cash withdrawals by beneficiaries limit the role of banks to simple transfer points, and low levels of mobile banking use remain an issue. In addition, disasters may directly affect bank staff and infrastructure, further complicating service delivery.

Beneficiary targeting and data management emerged as critical cross-cutting issues. The need for pre-approved beneficiary lists for anticipatory action was emphasized, with a clear call to move beyond purely socio-economic criteria and integrate disaster risk and flood exposure data. Challenges related to accessing and managing social protection data were also discussed, including limited access to MIS data for local DRR focal points, administrative hurdles in beneficiary registration, and risks of duplication or exclusion. Strengthening the National ID system and improving integration across existing databases were identified as essential to improve coordination and targeting effectiveness.

Recommendations/ Way Forward

- Expand SRSP orientation and capacity-

Locally Led Anticipatory Action

Date: 23 December 2025 | **Duration:** 1 hour

Moderator: Mr. Dinesh Gurung, Danish Church Aid

Organized by: Danish Church Aid, START Network, UN Women, Plan International, and People in Need

Background / Context

This session explored how locally led approaches are being scoped and embedded within Nepal's National Anticipatory Action (AA) Framework, emphasizing community leadership, trust, and locally grounded decision-making. Designed as an interactive and reflective session, it combined storytelling from practitioners, local governments, civil society organizations, and communities with mindfulness, cultural expression, and participatory dialogue.

building at local government level to close the gap between policy adoption and practical implementation.

- Strengthen coordination mechanisms between banks, local governments, and response agencies, including contingency arrangements for surge capacity during emergencies.
- Integrate socio-economic data with hazard exposure data to improve beneficiary targeting for anticipatory action and shock responsive social protection.
- Establish a unified, regularly updated social registry system that captures key life events (birth, death, migration, economic change) and supports accurate targeting.
- Formalize monitoring and reporting mechanisms for SRSP implementation to strengthen accountability and track progress across all levels of government.
- Ensure SRSP explicitly addresses livelihood-sensitive sectors, including agriculture and informal labor, so that disaster response reaches those whose income sources are directly affected.
- Empower local governments to manage and coordinate sectoral data systems, strengthening interoperability and practical use of data for decision-making.



Also, through meditation, yoga, music, and audience engagement exercises, participants reflected on the meaning and value of locally led AA.

Key Issues Discussed

Audience inputs highlighted participation, timely action, preparedness, use of indigenous knowledge, community planning, and protection of vulnerable

populations, reinforcing that AA is most effective when it is community-driven and locally initiated.

Storytelling from Dodhara Chandani Municipality (Sudurpaschim) illustrated practical examples of locally led AA, including community-managed color-coded flood warning systems, household flagging to identify vulnerable groups, locally managed safe shelters, and coordination with gauge readers and security forces. These experiences demonstrated how trust, local institutions, and indigenous solutions can translate forecasts into early action. At the same time, concerns around social stigma in identifying vulnerable households highlighted the need for intersectional and sensitive approaches.

The discussion repeatedly underscored that while AA must be designed and owned locally, enabling conditions must be created at higher levels. As emphasized by Er. Dinesh Gurung, “we must understand AA from below but address the barriers from above.” Policy-level challenges including limited local capacity, unclear pre-disaster financing mechanisms, uneven functionality of LEOCs, and gaps in risk transfer systems—were identified as key constraints to locally led implementation.

Inputs from the National AA Framework drafting team and MoFAGA confirmed that locally led approaches are central to the framework, with local governments positioned as first responders for early action, stockpiling, and standby arrangements. However, strengthening institutional, financial, and technical support from federal and provincial levels remains critical to translate intent into practice.

Recommendations / Way Forward

- Strengthen the National AA Framework by explicitly institutionalizing locally led and bottom-up approaches, ensuring local governments and communities are positioned as frontline decision-makers for anticipatory action.
- Invest in capacity building of local governments, including functional LEOCs, technical skills, and financial readiness to act before disasters occur.
- Improve risk communication and last-mile delivery by blending scientific forecasts with indigenous knowledge, cultural practices, and trusted community channels to enhance trust and actionability.
- Promote replication and scaling of proven local practices, such as community-based warning systems, safe shelters, and volunteer networks, beyond pilot areas.
- Ensure intersectional and stigma-sensitive approaches when identifying vulnerable households, with safeguards led by local governments and communities.
- Develop flexible and accessible financing mechanisms for anticipatory action at the local level, including pre-disaster budget provisions and risk transfer options.
- Address transboundary and cascading risks within the AA framework, recognizing cross-border hazards and overlapping climate shocks.

Climate Extremes: Mountain Hazards and Drought



Date: 23 December 2025 | Duration: 1 hour

Moderator: Basanta Raj Adhikari, IOE, Pulchowk Campus and Jeevika Khadka, Stimson Center

Presenters:

- Mr. Jagdish Dotel, Mercy Corps Nepal
- Ms. Luna Khadka, World Vision International Nepal
- Mr. Manish Raj Gouli, Stimson Center

Panelists:

- Mr. Rajendra Sharma, Under Secretary (Technical), NDRRMA
- Ms. Bibhuti Pokharel, Senior Divisional Meteorologist, DHM
- Mr. Deepak KC, Programme Analyst, UNDP Nepal

Organized by:

- Stimson Center, Mercy Corps Nepal, and World Vision International Nepal

Background and Context

Nepal is experiencing escalating climate extremes across both high mountain regions and downstream landscapes, posing increasing risks to lives, livelihoods, and ecosystems. Hazards range from slow-onset droughts affecting agriculture and food security to rapid-onset mountain hazards such as glacial lake outburst floods, extreme rainfall, and cascading flood risks. Anticipatory action is critical to reducing humanitarian and economic impacts by enabling early, risk-informed decision-making.

Early initiatives in Nepal show progress through multiple ongoing efforts. Drought monitoring is being supported through tools developed by Mercy Corps and START Fund in collaboration with DHM, alongside response activities led by World Vision. In high mountain regions, UNDP-supported projects are strengthening glacial and hydrometeorological monitoring and end-to-end early warning systems while building DHM's capacity to generate, analyze, and apply high-altitude climate and hazard data. Stimson Center is advancing modelling of cascading mountain hazards to inform early warning and disaster risk reduction measures. These initiatives provide a foundation for anticipatory action, but gaps remain that limit timely and proactive interventions.

Key Issues Discussed

Despite these initiatives, Nepal faces significant technical and institutional challenges in operationalizing anticipatory action. Current drought monitoring relies primarily on meteorological indicators such as the Standardized Precipitation Index, which do not fully

capture agricultural impacts, soil degradation, or broader livelihood effects. Observations show that dry spells frequently escalate into emergency responses due to the absence of clearly defined thresholds for early action.

Mountain hazard monitoring is limited by datasets on glaciers, moraine stability, and glacial lake dynamics, while smaller or previously unclassified lakes remain unmonitored. High-altitude and remote locations complicate real-time monitoring, data transmission, and system maintenance. Although modeling of cascading hazard chains and extreme flow events demonstrates potential for scenario-based risk assessment, these outputs are not yet fully integrated into operational early warning systems or local disaster risk reduction measures.

Coordination between DHM, sectoral ministries, local governments, and development partners remains fragmented, with forecasting and advisories largely separate from implementation responsibilities. Transboundary cooperation with upstream neighbours is weak, and no formal data-sharing mechanisms exist. Operational and financial constraints further limit anticipatory action, particularly in remote and high-altitude areas, as short-term or pilot-based interventions often lack sustainable pre-financing or emergency funds. While current initiatives expand monitoring infrastructure, early warning systems, and modeling capabilities, significant data gaps and capacity limitations persist, highlighting the need for sustained investment to strengthen anticipatory action across Nepal's mountain and drought-prone areas.

Recommendations / Way Forward

- Develop and adopt a national drought manual that standardizes drought definitions, indicators, triggers, and institutional roles, with a specific emphasis on agricultural drought and its impacts on crops, soil health, and livelihoods.
- Strengthen drought monitoring systems by integrating meteorological indicators with agricultural, hydrological, soil moisture, and irrigation-related information to better inform anticipatory action and decision-making at national and local levels.
- Improve the development of operational triggers for both drought and mountain hazards by ensuring they are context-specific, feasible to implement in data-scarce and remote environments and aligned with institutional mandates and capacities.
- Invest in comprehensive risk information systems for mountain hazards, including systematic inventories of glaciers and glacial lakes, long-term monitoring of lake dynamics and moraine stability, and assessment of cascading risks supported by modelling and sustained observations.
- Expand and sustain high-altitude monitoring and communication infrastructure, including automatic weather stations and alternative communication systems suitable for Nepal's remote and mountainous terrain.
- Strengthen coordination across forecasting, early warning, and response by linking disaster management authorities, sectoral ministries, local governments, and development partners to enable timely and effective early action.
- Establish sustainable financing mechanisms for anticipatory action, including internal emergency funds and pre-financing arrangements, to move beyond short-term, pilot-based interventions.
- Advance transboundary and regional cooperation through formal government-to-government processes for data sharing, joint research, and joint early warning systems, particularly for upstream glacial lake outburst flood risks.
- Integrate multi-hazard early warning and anticipatory action approaches to better reflect Nepal's complex, cascading, and compound risk landscape.
- Systematically consolidate, verify, and share scientific research outputs, earth observation products, and rapid mapping generated during hazard events to support preparedness, anticipatory planning, and informed decision-making.
- Engage non-traditional actors, including mountaineering, rescue, and mountain-based organizations, to leverage terrain-specific operational knowledge and expertise for disaster risk reduction and anticipatory action in high mountain areas.

Technology and Innovations for AA

Date: 23 December 2025 | **Duration:** 1 hour

Opening Remarks: Ashok Sharma, NDRRMA

Moderator: Sudarshan Hamal (NAXA)

Presenters:

- Mr. Man Bahadur Kshetri, WFP Nepal
- Ms. Shristi Piya, Rumsan
- Ms. Puja Shakya and Mr. Sujal Manandhar, RIMES Nepal
- Mr. Bibhor Kayastha, Aarya Technologies
- Ms. Bidhya Bhandari, NAXA
- Mr. Suraj Gautam, IHRR
- Mr. Suraj Shrestha, CARE

Organized by:

- Mercy Corps, NAXA, IHRR, START Network, WFP



Background/ Context

Embedding AA within Nepal's disaster risk management system depends on the strategic use of technology to strengthen risk analysis, forecasting, decision-making, and the timely implementation of early actions. Innovations such as decision-support systems, spatial analysis, impact-based forecasting, blockchain-enabled delivery mechanisms, and citizen science are increasingly shaping how anticipatory action is designed and implemented. However, their effectiveness relies on alignment with national laws, policies, and institutional systems.

The discussion therefore focused on showcasing practical tools, sharing implementation experiences, and identifying pathways to integrate and scale technological solutions within Nepal's disaster management framework, while ensuring they remain inclusive, locally grounded, and sustainable.

Key Discussions

Impact Forecasting for Floods: The discussion highlighted impact forecasting as a shift from identifying hazard-prone areas to estimating location-specific impacts before a flood occurs, enabling targeted anticipatory actions. The current Impact-Based Forecasting (IBF) approach was noted to have limitations in capturing the scale of impact, spatial resolution, and cluster-specific activation thresholds. Strengthening pre-event impact estimation, setting location-based triggers, and applying dasymetric mapping, combined with transport, agriculture, and vulnerability layers, were identified as key steps to improve household-level targeting and resource allocation.

Rahat Platform: The Rahat platform was presented as a blockchain-enabled system designed to support anticipatory action through integrated early action planning, automated fund disbursement, and financial inclusion. It enables multi-modal cash transfers through bank accounts or digital wallets, supported by early warning alerts via text and voice messages. Fund releases are triggered through a combination of forecast data, climate information, and human verification, though the platform has so far been tested only through simulations, with no live anticipatory actions implemented.

Satark Decision Support System: RIMES introduced the Satark Decision Support System, which uses the WRF flash flood model to generate real-time and historical flood forecasts across defined catchments. The platform issues alerts based on rainfall thresholds and integrates multiple hazard models, including landslides, thunderstorms, lightning, and forest fires. Vulnerability and evacuation layers are embedded in the dashboard, and alerts can be disseminated to predefined users through email and social media channels.

Lali 360 (Aarya Technology): Lali 360 was presented as an automated platform addressing inefficiencies in traditional relief systems, particularly in logistics, financial tracking, and beneficiary management. The system uses blockchain for group cash transfers and electronic vouchers, integrates with banks and digital wallets, and connects supply chains to support market-based approaches and transparent reporting. While the technology is functional, its effective use depends on the readiness of government institutions to integrate it into existing disaster management systems.

DAASTA (NAXA): DASTAA was presented as an integrated multi-hazard preparedness system that assesses household-level risks and categorizes them into high, moderate, or low. The platform disseminates risk-segregated information to targeted groups based on physical, structural, and socio-economic vulnerabilities, with households accessing profiles via mobile apps. Building on questions of resilience in evacuation centers such as schools and health facilities, the system has expanded into thematic risk assessments and is currently implemented in 4 municipalities of Nepal, 2 unions in Bangladesh, and 3 traditional authorities in Malawi.

VICTORY (IHRR): The VICTORY project was presented as a citizen science initiative for hydrometeorological monitoring that can strengthen anticipatory action against floods and landslides in Nepal. The program help collect localized data and address gaps between limited monitoring stations by equipping local citizen scientists with low-cost rain gauges made of recycled materials and water level indicators made of bamboo. The project has trained 106 citizen scientists in Bhimeshwor and Barbardiya municipalities to date, while refining its approach to improve data consistency and hardware durability. The project is now expanding to other disaster-prone

regions through mobile and web applications that integrate community data with professional forecasts.

Anticipatory action tool for heat and cold waves in Nepal : The anticipatory action tool was presented as an innovative system for managing heat and cold wave risks using forecast-based information. The tool combines spatial and temporal trend analysis of historical events, real-time and archived monitoring of temperature extremes, percentile and absolute thresholds for different regions, and station- and district-level map visualizations. A key feature is its sub-province alert mechanism, which issues warnings by risk level to support timely preparedness and response. The tool is designed to strengthen operational use by linking alerts with local response protocols, enabling communities to take early action against extreme temperature events.

Recommendations/ Way Forward

- Technological innovations and tools should be aligned with the Shock Responsive Social

Protection (SRSP) guidelines to ensure practicality within the national disaster management framework.

- Flood and landslide forecasting systems should integrate the complexities of these hazards to reduce false positives and improve the effectiveness of anticipatory actions.
- Local governments should assess their capacities and adopt technology-driven anticipatory actions, accordingly, considering differences in readiness and resources.
- Citizen-generated and crowdsourced data should be leveraged to enhance local risk awareness and strengthen early warning and anticipatory action systems.
- Sub-province heat wave alert features should be linked with local response protocols to trigger timely community preparedness actions.

CROSS-CUTTING SESSIONS

Lightning Talk

Lightning Talks provided a rapid-sharing platform for organizations to highlight Anticipatory Action experiences across different hazards and contexts, focusing on key lessons, practices, and innovations.

Heat Anticipatory Action

Speaker: Ms. Arya Regmi, *NRCS*



The session emphasized the growing need to address heat-related risks as part of the country's disaster risk

management and climate adaptation efforts. It focused on developing a national Roadmap for Heat Anticipatory Action and a simplified Early Action Protocol for urban heat, aligned with international guidance on protecting communities from extreme climate impacts. The roadmap is planned as an annex to the national anticipatory action framework and will be developed through stakeholder consultations, literature review, vulnerability assessments, and iterative validation processes. Effective implementation is expected to improve early warning systems, public safety measures, community preparedness, and strengthen local institutions through evidence-based decision-making. Participants reflected on the importance of completing and endorsing the roadmap in a timely manner, ensuring strong stakeholder engagement, integrating heat-related actions into existing disaster management systems, and enhancing coordination between national and local institutions to make anticipatory action practical and sustainable.

Anticipatory Action for Landslides: Agromet and Community Rainfall Monitoring

Speaker: Mr. Raj Pariyar, *WHH Nepal*



The session highlighted the importance of linking weather information with community action to reduce risks to lives, livelihoods, and infrastructure. Agro-meteorological advisories guide farming decisions and support timely action, while community-based rainfall monitoring enables local responses such as evacuation and asset protection. This also provides data to strengthen municipal disaster management and set locally relevant early warning thresholds.

A case from Pokharipata, Gurbhakot Municipality in Surkhet illustrated these approaches in practice, where timely alerts allowed safe evacuation and the rescue of five individuals without casualties. The discussion

emphasized expanding community rainfall monitoring, establishing clear local thresholds for action, and strengthening coordination between weather services

and community response. Building capacity at ward and municipal levels was highlighted as key to sustaining timely and effective anticipatory action.

Each One Teach Five Campaign

Speaker: Ms. Savita Shah & Ms. Sadhana Yadav
Field Supervisor, Plan International Nepal/ Aasman Nepal and Child Club Chair/ School Safety Champion.

The Each One Teach Five campaign focuses on community-based awareness and preparedness through a participatory approach, with students and child clubs actively engaged as key change agents. The campaign prioritizes households identified as high-risk, which are marked accordingly and given focused attention during awareness activities.

The campaign's major priority areas include: (a) training community members on staying safe during hazards such as cold waves and fires; (b) raising awareness on disaster preparedness, response, and post-disaster management practices; (c) supporting households to identify safe spots both inside and outside their homes, as well as safe evacuation locations; (d) promoting the importance of Go-Bags, practical preparedness



measures, and the use of emergency contact numbers to enable faster and more effective post-disaster response; and (e) strengthening the capacity of community members to quickly disseminate safety-related information within their neighbourhoods.

One UN- Coordinated Action for Local Level Intervention

Speaker: Mr. Nitesh Shrestha, *WFP Nepal*

The session outlined how UN Nepal is operationalizing one coordinated approach to anticipatory action that connects preparedness, forecasting, financing, and delivery at the local level. It highlighted nationwide pre-positioning of WASH, safety, and dignified kits through humanitarian staging areas to enable rapid response before crises, an approach now being adopted by provincial governments. Through support to EW4All and the Anticipatory Action framework, UN Nepal jointly developed a SURF-based AA framework with clear thresholds, triggers, lead times, targeting criteria, defined roles, and pre-arranged financing. The presentation emphasized evidence-based action through scientific impact evaluation, joint post-distribution monitoring, and systematic learning from both successes and gaps. Delivery is guided by measured and quantified risk, enabling timely cash assistance, essential kits, and psychosocial support. Looking ahead, the focus is on improving forecast accuracy and



lead time, advancing sector-specific impact forecasting and risk messaging through the cluster system, and using risk layering to inform decisions on insurance and contingent financing.

Enhancing AA through Landslide-based Satellite Forecasting:

Speaker: Sabin Bhattarai, *ICIMOD*



In the session, ICIMOD shared insights on Nepal's disaster context, highlighting its high vulnerability to climate- and water-induced hazards, particularly floods, landslides, and droughts. The discussion focused on landslide forecasting, including the use of rainfall thresholds and algorithm-based models to predict landslide initiation, as well as advanced satellite-based systems that integrate factors like geology, slope, and precipitation. Participants explored how these forecasts can inform early warning systems, raise community awareness, and guide timely dissemination of alerts in landslide-prone basins across Nepal. The session emphasized strengthening local preparedness by leveraging both scientific modelling and satellite data for actionable anticipatory measures.

Key Highlights from the Global and Regional Dialogue Platform



Global and Regional dialogue platforms provide an interactive and engaging space for the anticipatory action (AA) community to share knowledge, lessons learned, and best practices, driving a shift in the humanitarian system from reaction to anticipation. These events bring together humanitarian actors, government representatives, meteorologists, scientists, donors, and decision-makers to explore how AA can be implemented in new contexts, for additional hazards, and through better use of weather and climate data. The 13th Global Dialogue Platform on Anticipatory Humanitarian Action took place from 2–4 December 2025 in Berlin and online, marking ten years of AA innovation and reflection under the theme “Anticipatory Action: A Decade of Learning, a Future in a Changing Humanitarian Landscape.” The 2025 Asia Pacific Regional Dialogue on Anticipatory Action was held from 4–6 November 2025 in Yogyakarta, Indonesia, focusing on harmonizing AA approaches across the region, sharing country-level experiences, fostering regional commitments, and exploring collaboration opportunities. For Nepal, participation in these dialogues has been key to adapting global and regional

learnings, strengthen national AA strategies, enhance cross-institutional coordination, and support the scale-up of locally led and evidence-based anticipatory interventions.

Speakers:

- Alina Karki - IFRC/ Danish Red Cross
- Aastha Pradhana -People in Need
- Pranav Dahal- START Network
- Upama Ojha – IFRC/ American Red Cross

Global Dialogue on Anticipatory Action:

At the 13th Global Dialogue in Berlin, Nepal’s representatives highlighted the country’s progress in institutionalizing AA through the AA Clinic, advancing impact-based forecasting, conducting climate risk and vulnerability analysis, and addressing cascading hazards. Discussions emphasized learning from international communities of practice, exploring applications of artificial intelligence in AA, and initiating anticipatory action for non-hydrometeorological hazards. Key takeaways included scaling pilot initiatives, fostering cross-institutional collaboration, exploring innovative

financing, and supporting locally led approaches, with engagement through platforms such as the Anticipation Hub.

South Asia Regional Dialogue on Anticipatory Action:

The Asia Pacific Regional Dialogue in Indonesia, focused on harmonizing AA, operationalizing national roadmaps, applying the five pillars of AA, documenting evidence, and enhancing institutional readiness. Nepal committed to mainstreaming Early Warnings for All and

AA roadmaps, presenting action plans outlining priority support areas, lead agencies, resource mobilization, and coordination mechanisms. NDRRMA was recognized as the lead for the Community of Practice in Nepal. The discussion at the regional dialogue also highlighted Nepal's progress in advancing AA through institutionalization, the pivotal role of the AA Clinic in developing the National AA framework, and efforts to promote a harmonized approach across the Asia-Pacific region.

CLOSING REMARKS

22 Dec 2025 | 5:30 - 5:30

Moderator: Reena Bajracharya, Technical Coordinator, AA Clinic

Speakers:

- Mr. Ganesh Gautam, Chairperson, Janaki Rural Municipality
- Er. Dinesh Prasad Bhatt, Chief Executive, NDRRMA

Mr. Ganesh Gautam,

Chairperson, Janaki Rural Municipality



Speaking as the exemplar of local government to share the experience of two days event, Mr. Gautam reflected on the importance of coordination and harmony among all stakeholders for effective anticipatory action. He began by drawing on the idea of men and women as the

two wheels of a chariot, and extended this analogy to local governance—emphasizing that elected representatives and administrative staff function as the two equally essential wheels of local government. Similarly, the two days' events made him realize that local government representatives, staff across levels, and humanitarian agencies function as interdependent “wheels of a chariot,” and progress in disaster preparedness requires their collaborative engagement. He emphasized that all three parties should be equally equipped and trained for the effectiveness of anticipatory activities.

He also highlighted the growing involvement of Generation Z, whose fresh ideas and digital fluency present opportunities for more innovative approaches. At the same time, he stressed that anticipatory approaches should also engage fathers, brothers, and uncles of Gen Z, ensuring inclusivity across age groups and community members. He noted that anticipatory action and early warning systems must be inclusive of all age groups and diverse community members. He concluded that discussions on the anticipatory action framework would have even greater impact if they extended to the implementation level, strengthening disaster mitigation efforts.

Er. Dinesh Prasad Bhatt,

Chief Executive, NDRRMA

CE Dinesh Bhatt concluded the two-day dialogue by reflecting on the valuable opportunity it provided to learn from each other's experiences, which will also help NDRRMA to finalize the National Anticipatory Action Framework. He emphasized the importance of clarity in roles and responsibilities, stating, "We remain uncertain until roles and responsibilities are clearly defined" ("कुन दायित्व कस्तो हो स्पष्ट नहुँदा सम्म हामी अलमलमा पर्छौं"). CE Bhatt also stressed the value of strengthening local governments as first responders, as they hold critical information about vulnerable groups. Reflecting on the National Dialogue series, he said Nepal has progressed from socializing AA, connecting science and policy, developing the framework, to moving "from commitment to action."

Reviewing current initiatives underway related to EWS, he highlighted the use of UNDP-GCF funds in lowering four lakes and implementing AA and early warning systems in 31 municipalities, with NDRRMA leading efforts to link local emergency operation centers and disaster management committees to targeting and inclusion processes. Looking ahead, he highlighted the need for sustainable AA financing, which may include increased engagement of the private sector, linking tax revenue to disaster management, and increasing insurance coverage for households and reconstruction. He acknowledged UN agencies, the WMO, and the



Government of Nepal for their continued support in expanding and improving disaster and climate risk management in Nepal.

In closing he reaffirmed commitment to the AA Framework, the EW4All Roadmap, and sectoral roadmaps on air pollution and forest fire management which should be carried out under a "whole-of-government and whole-of-society approach". He concluded his remarks by thanking presenters, moderators, participants, supporting organizations, and ICIMOD for hosting the event.

SUMMARY OF KEY TAKEAWAYS

Over the course of two action-packed days, the dialogue highlighted critical lessons, reflections, and forward-looking priorities for advancing anticipatory action in Nepal. Participants shared experiences, challenges, and innovative practices, generating consensus on key themes that will guide the operationalization of the National Anticipatory Action Framework, strengthen early warning systems, and support locally led, evidence-based action. The following takeaways summarize the main points discussed during the workshop:

Institutionalization of Anticipatory Action: Nepal has moved from piloting anticipatory action to embedding it within the national disaster management system. This transition is marked by the establishment of the Anticipatory Action Clinic within NDRRMA and the adoption of the National Anticipatory Action Framework alongside the EW4All Five-Year Roadmap for 2026–2030. The Fourth National Dialogue underscored the need to translate these policy commitments into routine operational practice across government systems. Participants also emphasized aligning the EW4All Roadmap with the National Anticipatory Action Framework to prevent overlap across pillars and institutional mandates and to strengthen institutional ownership.

Governance, Roles, and Institutional Capacity: Effective anticipatory action requires clear governance arrangements and sufficient institutional capacity. The workshop emphasized the need to clarify and strengthen roles across federal, provincial, district, and local levels, particularly for Chief District Officers, District Disaster Management Committees, municipalities, and local disaster management committees. NDRRMA continues to play a central convening role, though staffing and budget constraints remain significant. A whole-of-government and whole-of-society approach is essential, with local governments recognized as first responders due to their proximity to communities and understanding of local risks.

From Early Warning to Early Action: The discussions reinforced that early warning systems are only effective when they result in timely and protective

action. Priorities include strengthening impact-based forecasting, establishing trigger thresholds that are consistent yet adaptable to local contexts, and linking warnings to clear standard operating procedures. Challenges persist in translating centralized forecasts into locally actionable information, particularly in mountainous and remote areas where data, infrastructure, and communication limitations constrain early action.

Data, Forecasting, and Knowledge Integration: Participants highlighted the need to strengthen the evidence base for anticipatory action through long-term datasets, improved hydrometeorological and high-altitude monitoring, community-based rainfall monitoring, satellite data, and transboundary data sharing. Integrating scientific forecasts with traditional and local knowledge, such as agricultural and cultural calendars, was seen as important for improving relevance, trust, and use at the community level. Traditional indicators require scientific validation, and stronger coordination mechanisms are needed for data sharing, including for sensitive datasets.

Financing and Operational Readiness: Predictable and flexible financing remains critical for effective anticipatory action. Delays in fund release, rigid budget structures, and short lead times continue to limit implementation. The workshop emphasized the importance of pre-arranged financing, internal emergency funds, risk financing and insurance mechanisms, and private sector engagement. Financing constraints are closely linked to operational readiness, including staffing, logistics, and preparedness at all levels.

Anticipatory Action Beyond Cash: Anticipatory action was clearly articulated as extending beyond cash transfers. The National Anticipatory Action Framework identifies fourteen activities across seven categories, including pre-positioning, stockpiling, standby arrangements, early preparedness measures, and awareness activities. Conditional cash transfers represent one element within a broader preparedness and protection system.

Localization, Inclusion, and Community Leadership:

Locally led anticipatory action was identified as essential for effectiveness and sustainability. The workshop emphasized the need for communities to move from being passive recipients to active participants in early action. Meaningful inclusion of women, marginalized groups, persons with disabilities, children, and youth strengthens ownership, trust, and equity, and improves the relevance of anticipatory measures.

Expanding Anticipatory Action Across Hazards

and Contexts: While anticipatory action for floods is more advanced, participants stressed the need to expand anticipatory action to other hazards, including landslides, drought, heatwaves, forest fires, air pollution, health risks, and glacial lake outburst floods. Anticipatory action should remain flexible and context-specific, with hazard-specific triggers and simplified protocols adapted to local conditions.

Integration with Social Protection and Innovation:

Linking anticipatory action with shock-responsive social protection systems can improve speed and coverage, particularly through better use of social registries, targeting mechanisms, and payment systems. Innovation, including artificial intelligence, satellite-based forecasting, and digital platforms, should strengthen and align with national systems.

Accountability, Learning, and Regional**Cooperation:**

Anticipatory action should be assessed based on its ability to protect lives, reduce losses, and preserve dignity. Sustained implementation requires institutional accountability, long-term financing, and continuous learning. Regional and global cooperation remains important, particularly for transboundary and mountain risks, to support data and knowledge sharing as well as the learning process that will support the continual improvement of AA practices for early warning and early action, in Nepal and beyond

As Nepal advances toward a more resilient and proactive disaster management system, the collective insights from this dialogue provide a solid foundation for the next phase of anticipatory action. Building on the national framework, the priority ahead must be on translating policy commitments into sustained operational practice by strengthening institutional ownership, strengthening coordination, clarifying roles across all levels of government, and ensuring predictable financing. Equally important is the need to invest in effective early warning systems that trigger timely early action, supported by robust data, local knowledge, and meaningful community participation. By expanding anticipatory action across multiple hazards, strengthening linkages with social protection systems, and promoting innovation, accountability, and regional cooperation, Nepal has a significant opportunity to establish a more inclusive, responsive, and proactive disaster management system while setting a strong example for anticipatory action in the region and beyond.

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