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TERMS OF REFERENCE

Consultant for a Heatwave Anticipatory Action Framework in the Philippines

CONTRACT MODALITY	Individual Consultancy
DUTY STATION	Manila
DURATION OF CONTRACT	9 months

Purpose of Assignment

Under the supervision of the CER Section and Emergency Specialist, and in close coordination with relevant UNICEF sections, implementing partners, government counterparts, the National AA Technical Working Group and the pilot LGU, the consultant will lead the technical development, validation, simulation, pilot implementation, learning and refinement of a practical, government-aligned Anticipatory Action Framework for Heatwaves in the Philippines as part of UNICEF Philippines' initiative on Healthy Environment and Climate Resilience for Children. The framework will build on relevant anticipatory action models and government systems and support future integration and scale-up of heatwave anticipatory action in the Philippines.

Background

Extreme heat is an increasingly important but still under-managed hazard in the Philippines. Heat events build over days, often peak during the dry season, and may be intensified during El Niño conditions. While PAGASA issues heat index forecasts and danger-level classifications, and schools have shifted to alternative delivery modes during past heat episodes, there is not yet a dedicated anticipatory action framework or operational mechanism for heatwaves that systematically links forecasts to pre-agreed triggers, financing, roles and early actions at different levels (households, communities, LGUs, etc.). As a result, heat risks do not yet consistently trigger pre-agreed, pre-financed local action in the same way as more established hazards.

Children are disproportionately affected by extreme heat because of their physiology, dependence on caregivers, and exposure through homes, schools and communities. Infants and young children, pregnant women, children with disabilities, children in informal settlements or poorly ventilated housing, and children from low-income households face heightened risks. Heat can disrupt schooling, strain water supply and health services, increase household costs of basic needs and commodities, reduced income and livelihoods opportunities, and push families toward negative coping strategies.

This assignment aims to respond to that gap and forms part of UNICEF Philippines' partnership with Prudence Foundation on Healthy Environment and Climate Resilience for Children. The partnership supports evidence generation, policy reform, systems strengthening, public awareness, and modelling of practical approaches in high risk localities to protect children from heatwaves and other environmental hazards. Within this broader engagement, the development of a Heatwave Anticipatory Action Framework is intended to translate heat-health preparedness into an operational model that links risk analysis, forecast-based triggers, child-focused early actions, financing, coordination, simulation, pilot implementation, learning and future scale-up.

The framework will build on existing policy, technical and coordination foundations rather than creating a parallel system. Key reference points include:

- **Republic Act 12287** (Declaration of a State of Imminent Disaster), signed on 12 September 2025. The law provides

an enabling policy basis for government to act before a hazard becomes a disaster by using standardized, science-informed triggers and by allowing access to local and national DRRM Funds and allocation of AA funds into NGAs' regular agency budget under the GAA for anticipatory and preparedness measures. Its implementation creates an important opportunity to align UNICEF-supported anticipatory action with national and local government systems, including trigger protocols, pre-agreed roles, financing arrangements, and coordination mechanisms. The consultant will review how RA 12287 and its implementing rules and regulations can inform the design of a Heatwave Anticipatory Action Framework.

▪ **PAGASA's Multi-Hazard Impact-Based Forecasting and Early Warning System (MHIBFEWS)**. This system is expected to provide a key national platform for translating weather and climate forecasts into practical, impact-based warnings that can guide early action across hazards. For heatwaves, MHIBFEWS can help connect heat index forecasts and other climate signals with likely impacts on children, schools, health services, water access, livelihoods and vulnerable households. The consultant will assess how the proposed heatwave triggers, readiness actions and activation protocols can be aligned with PAGASA products and MHIBFEWS processes, so that the framework builds on government-recognized warning systems rather than creating a parallel mechanism.

▪ **The National AA Technical Working Group**, chaired by DSWD and co-chaired by the Philippine Red Cross, serves as the main coordination platform for anticipatory action partners in the Philippines. It provides a venue to align trigger approaches, early action packages, financing arrangements, implementation roles, and learning across agencies and hazards. The consultant will engage with the TWG to ensure that the proposed heatwave framework is consistent with national anticipatory action standards, complements ongoing work by government and partners, and can be positioned for validation, endorsement, and possible scale-up through existing coordination mechanisms.

▪ **Inter-agency coordination for design, testing and pilot implementation**. The framework will require coordinated engagement with UNICEF sections, UNICEF implementing partners, PAGASA, OCD, DSWD, CWC, DOH, DepEd, DILG, CCC, the National AA Technical Working Group and the pilot LGU. Coordination will be important to align forecast information, trigger thresholds, local readiness, activation roles, sector specific early actions, financing pathways, implementation responsibilities, simulation, pilot testing, learning and eventual integration into government systems.

▪ **Existing anticipatory action frameworks and operational models across hazards.** These may include national, UN, Red Cross/Red Crescent, NGO, and country-level frameworks for hazards such as tropical cyclones, floods, drought, and heatwaves. The consultant will review relevant examples, including their trigger design, readiness and activation protocols, pre-arranged financing, early action packages, delivery mechanisms, coordination arrangements, and monitoring and learning systems, and identify elements that can be adapted as the basis for developing a child-focused Anticipatory Action Framework for Heatwaves in the Philippine context.

▪ **International and country-level heatwave anticipatory action models and guidance**. The consultant will review relevant heatwave anticipatory action models and guidance to identify adaptable lessons for trigger design, early action planning, coordination, implementation and learning in the Philippine context.

Scope of Work

▪ **Inception and methodology**

o Conduct a broad desk review of relevant anticipatory action frameworks, heatwave anticipatory action models and guidance, and government systems, including RA 12287 and its IRR, PAGASA heat products and MHIBFEWS.

o Hold initial consultations with UNICEF sections and key government counterparts to confirm expectations, data availability and coordination arrangements.

o Refine the methodology, work plan, stakeholder map, data requirements, consultation tools, coordination plan, validation approach and sequencing of activities, including key decision points and contingency arrangements for

the pilot.

▪ **Risk analysis and pilot site selection**

o Conduct heat hazard, exposure and vulnerability analysis, including review of heat index patterns, seasonality, exposure trends and available local risk data.

o Map child vulnerability using relevant demographic, social protection, nutrition, education, child protection, WASH, settlement and health indicators.

o Develop pilot site selection criteria, prepare a shortlist of candidate municipalities, and produce a risk profile of the selected site. o Scoping of partners, suppliers, and nature-based solutions

▪ **Forecast-based trigger system**

o Develop readiness, activation/deactivation and, where feasible, observational trigger options, building on PAGASA heat index products and complementary forecast and early warning information, and aligned with MHIBFEWS where possible.

o Conduct a focused technical review of relevant trigger approaches, forecast products and early warning methodologies to inform thresholds, lead times, activation rules and forecast performance assessment.

o Assess forecast performance, including reliability, operational feasibility, false alarms and missed events.

▪ **Anticipatory action package and delivery arrangements**

o Define child-centered anticipatory actions across relevant sectors, heat risk level, and implementation levels including households, communities, LGUs, and partners and link these actions to the proposed trigger levels.

o Set targeting criteria, unit costs, supply and partner requirements, delivery channels, and prepare, start, pause, stop and re-activation rules for each action.

o Assess feasibility within available lead times and UNICEF delivery channels.

o Develop accountability to affected populations (AAP), safeguarding, inclusion, MEL, post distribution monitoring and after-action review arrangements.

▪ **Financing and activation protocol**

o Cost the anticipatory action package and map potential financing sources, including relevant internal, government, pooled, multilateral and donor financing mechanisms that could support pre-arranged or rapid release funding for heatwave anticipatory action.

o Draft activation protocols, coordination arrangements, readiness requirements, and draft readiness, activation and stand-down notices.

o Define internal procedures, roles, and coordination arrangements across UNICEF, implementing partners, relevant government counterparts, the National AA Technical Working Group and the pilot LGU.

▪ **Simulation, validation and pilot-ready framework**

o Design, facilitate and evaluate a simulation exercise to test triggers, roles, activation pathways, information flows and coordination protocols.

o Prepare and present the draft pilot-ready framework for validation by the National AA Technical Working Group and endorsement by the pilot LGU DRRM Council, as appropriate, and document the outcomes.

o Revise the framework based on simulation and validation findings to produce a pilot-ready version and prepare the pilot implementation and learning plan.

▪ **Pilot implementation support**

o Support pilot preparation and operational readiness with UNICEF, implementing partners, relevant government counterparts and the pilot LGU, including LGU and partner orientation and practical guidance on triggers, roles and agreed anticipatory actions, a pre-season operational drill, coordination arrangements, pre-agreements and pre-identification of target households.

o Monitor forecasts against trigger thresholds throughout the pilot period, support readiness, activation and stand-down decisions, and provide technical support during implementation, with implementing partners responsible for delivering the anticipatory actions.

o Capture real-time learning on the triggers, timeliness, reach and relevance of actions, and support post-distribution monitoring.

o If heatwave triggers are not reached during the pilot period, document forecast monitoring, readiness actions, coordination undertaken and agreed alternative learning activities, such as readiness-only activation, simulation refresh or tabletop review.

▪ **Learning review and framework update**

o Facilitate a post-pilot after-action review, drawing on pilot documentation and post-distribution monitoring findings or, if triggers were not reached, on forecast monitoring and readiness findings, with UNICEF, implementing partners, relevant government counterparts, the National AA Technical Working Group, the pilot LGU and other relevant stakeholders.

o Update the Heatwave Anticipatory Action Framework based on simulation, government validation and pilot learning, including adjustments to triggers, anticipatory actions, roles, financing, activation procedures and MEL arrangements.

o Prepare recommendations for scale-up and integration into government systems, including alignment with RA 12287 and its IRR, and prepare the final presentation and concise summary brief.

Expected Deliverables

▪ **Inception and methodology**: Inception report with methodology, work plan, stakeholder map, data requirements, desk review findings, consultation tools, coordination plan, timelines, validation approach, sequencing of activities, key decision points and pilot contingency arrangements.

▪ **Risk analysis and pilot site selection:** Heat risk analysis and pilot site selection report, including heat hazard, exposure and vulnerability analysis; child vulnerability mapping; pilot site selection criteria; shortlist of candidate municipalities; and risk profile of the selected site.

▪ **Forecast-based trigger system:** Forecast-based trigger system and performance assessment, including proposed readiness, activation and, where feasible, observational trigger options; focused technical review of trigger approaches, forecast products and early warning methodologies; proposed thresholds, lead times and activation rules; and assessment of forecast performance, reliability, operational feasibility, false alarms and missed events.

▪ **Anticipatory action package and delivery arrangements:** Draft child-focused anticipatory action package, including proposed actions across relevant sectors; targeting criteria; unit costs; supply and partner requirements; delivery channels; prepare, start, pause, stop and re-activation rules; feasibility assessment; and related AAP, safeguarding, inclusion, MEL, post-distribution monitoring and after-action review arrangements.

Financing and activation protocol: Financing and activation protocol package, including costing assumptions; potential financing sources; activation procedures; coordination arrangements; readiness requirements; roles of UNICEF, implementing partners, relevant government counterparts, the National AA Technical Working Group and the pilot LGU; and draft readiness, activation and stand-down notices.

Work Assignments Overview	Deliverables/Outputs	Delivery deadline to complete the

		deliverable
Inception and methodology • Conduct broad desk review of anticipatory action frameworks, heatwave AA models and guidance, and government systems, including RA 12287 and its IRR, PAGASA heat products and MHIBFEWS. • Hold initial consultations with UNICEF sections and key government counterparts to confirm expectations, data availability and coordination arrangements. • Refine the methodology, work plan, stakeholder map, data requirements, consultation tools, coordination plan, validation approach and sequencing of activities.	Inception report with methodology, work plan, stakeholder map, data requirements, desk review findings, consultation tools, coordination plan, validation approach, sequencing of activities, key decision points and pilot contingency arrangements.	30 November 2026
Risk analysis and pilot site selection • Conduct heat hazard, exposure and vulnerability analysis, including heat index patterns, seasonality, exposure trends and local risk data. • Map child vulnerability using relevant demographic, social protection, nutrition, education, WASH, settlement and health indicators. • Develop pilot site selection criteria, shortlist candidate municipalities and prepare the selected-site risk profile.	Heat risk analysis and pilot site selection report, including heat hazard, exposure and vulnerability analysis; child vulnerability mapping; pilot site selection criteria; shortlist of candidate municipalities; and risk profile of the selected site.	31 January 2027

Forecast-based trigger system • Develop readiness, activation and, where feasible, observational trigger options, building on PAGASA heat index products and complementary forecast and early warning information, and aligned with MHIBFEWS where possible. • Conduct focused technical review of trigger approaches, forecast products and early warning methodologies to inform thresholds, lead times, activation rules and forecast performance assessment. • Assess forecast performance, including reliability, operational feasibility, false alarms and missed events.	Forecast-based trigger system and performance assessment, including proposed readiness, activation and, where feasible, observational trigger options; focused technical review of trigger approaches, forecast products and early warning methodologies; proposed thresholds, lead times and activation rules; and assessment of forecast performance, reliability, operational feasibility, false alarms and missed events.	28 February 2027
Anticipatory action package and delivery arrangements • Define child-focused anticipatory actions across relevant sectors. • Set targeting criteria, unit costs, supply and partner requirements, delivery channels, and start, pause, stop and re activation rules. • Assess feasibility within available lead times and UNICEF delivery channels. • Develop AAP, safeguarding, inclusion, MEL, post-distribution monitoring and after action review arrangements.	Draft child-focused anticipatory action package, including proposed actions across relevant sectors; targeting criteria; unit costs; supply and partner requirements; delivery channels; start, pause, stop and re activation rules; feasibility assessment; and related AAP, safeguarding, inclusion, MEL, post distribution monitoring and after action review arrangements.	15 March 2027

Financing and activation protocol • Cost the anticipatory action package and map potential financing sources. • Draft activation procedures, decision making process, coordination arrangements, readiness requirements and stand down process. • Define roles of UNICEF, implementing partners, relevant government counterparts, the National AA Technical Working Group and the pilot LGU.	Financing and activation protocol package, including costing assumptions, financing options, activation procedures, decision making process, coordination arrangements, readiness requirements, roles and draft readiness, activation and stand down notices.	15 March 2027
Simulation, validation and pilot ready framework • Design and facilitate a simulation exercise to test triggers, roles, activation pathways, information flows and coordination protocols. • Prepare and present the draft pilot-ready framework for National AA Technical Working Group validation and pilot LGU DRRM Council endorsement or adoption, as appropriate. • Revise the framework based on simulation and validation findings and prepare the pilot implementation and learning plan.	Simulation, validation and pilot readiness package, including simulation exercise design and report; findings on triggers, roles, activation pathways, information flows and coordination protocols; documentation of the validation process with the National AA Technical Working Group and the endorsement or adoption process with the pilot LGU DRRM Council, as appropriate, including outcomes; revised pilot-ready Heatwave Anticipatory Action Framework; and pilot implementation and learning plan.	31 March 2027
Pilot implementation support • Support pilot preparation and operational readiness with UNICEF, implementing partners, relevant government counterparts and the pilot LGU,	Pilot implementation and learning report documenting pilot preparation, LGU orientation, operational readiness, forecast monitoring, readiness, activation, or stand-down decisions, implementation	31 July 2027

including LGU orientation, pre-season operational drill, coordination arrangements, pre agreements and pre identification of target households. • Monitor forecasts against trigger thresholds, support readiness, activation and stand-down decisions, and provide technical support during implementation. • Capture real-time learning and support post distribution monitoring. • If triggers are not reached, document forecast monitoring, readiness actions, coordination undertaken and agreed alternative learning activities.	support, actions delivered by implementing partners, community and partner feedback, preliminary post-distribution monitoring findings, implementation challenges, early results and lessons learned; or, if triggers are not reached, documentation of forecast monitoring, readiness actions, coordination undertaken, and agreed alternative learning activities.	
Learning review and framework update • Facilitate post-pilot after action review, drawing on pilot documentation, PDM findings or readiness findings. • Update the framework based on simulation, government validation and pilot learning. • Prepare scale-up and government integration recommendations, final presentation and concise summary brief.	Updated final Heatwave Anticipatory Action Framework reflecting simulation, government validation, pilot documentation, post distribution monitoring findings or readiness findings, and after-action review learning; recommendations for scale-up and integration into government systems, including alignment with RA 12287 and its IRR; final presentation to UNICEF and counterparts; and concise summary brief.	31 August 2027

Payment Schedule:
Payment will be made on submission and acceptance of deliverables. UNICEF reserves the right to withhold payment in case the deliverables submitted are not up to the required standard or in case of delays in submitting the deliverables on the part of the consultant.

Important Notes

- Individuals engaged under a consultancy or individual contract will not be considered "staff members" under the Staff Regulations and Rules of the United Nations and UNICEF's policies and procedures and will not be entitled to benefits provided therein (such as leave entitlements and medical insurance coverage). Their conditions of service will be governed by their contract and the General Conditions of Contracts for the Services of Consultants and Individual Contractors. Consultants and individual contractors are responsible for determining their tax liabilities and for the payment of any taxes and/or duties, in accordance with local or other applicable laws.
- The selected candidate is solely responsible for ensuring that the health insurance (and visa if applicable) required to perform the duties of the contract are valid for the entire period of the contract. Selected candidates are subject to confirmation of fully-vaccinated status against SARS-CoV-2 (Covid-19) with a World Health Organization (WHO)-endorsed vaccine, which must be met prior to taking up the assignment. It does not apply to consultants who will work remotely and are not expected to work on or visit UNICEF premises, programme delivery locations or directly interact with communities UNICEF works with, nor to travel to perform functions for UNICEF for the duration of their consultancy contracts.
- UNICEF offers reasonable accommodation for consultants with disabilities. This may include, for example, accessible software, travel assistance for missions or personal attendants. We encourage you to disclose your disability during your application in case you need reasonable accommodation during the selection process and afterwards in your assignment.

QUALIFICATIONS / SPECIALIZED KNOWLEDGE / EXPERIENCE/ COMPETENCIES (CORE/TECHNICAL/FUNCTIONAL) / LANGUAGE SKILLS REQUIRED FOR THE ASSIGNMENT

- Minimum requirements:
- **Education**: Bachelor's degree or higher in disaster risk management, climate science, meteorology, public health, humanitarian action, environmental science, development studies, social sciences, or another relevant field.
- **Work Experience**:
- At least 8 years of experience in disaster risk reduction, humanitarian action, climate risk management, anticipatory action, or related fields.
- Demonstrated experience designing, implementing, piloting, or evaluating anticipatory action or forecast based financing frameworks, including trigger development, activation protocols, early action design and learning processes.
- **Skills** (optional):
- Strong skills in climate and forecast data analysis, risk analysis, costing, financing analysis, MEL, post distribution monitoring, documentation and technical writing.
- Working knowledge of heat-health risk, heat index forecasting, impact-based forecasting, or early warning

systems is a strong asset.

- Strong facilitation and stakeholder engagement skills, including experience supporting consultations, technical workshops, simulation exercises, after action reviews and learning sessions with government, civil society, youth groups or community stakeholders.
- Experience supporting government validation, local adoption or integration of technical frameworks, plans or protocols is an asset.
- Experience designing community-level anticipatory or preparedness actions, including targeting, delivery arrangements, operational rules and partner coordination, is an asset.
- **Language Requirements**: Excellent written and oral English; proficiency in Filipino or other Philippine languages is an asset.
- **Desirables**:
- Experience with Philippine DRRM systems, coordination platforms and government counterparts, including PAGASA, OCD, DSWD, DOH, DepEd, DILG, CCC and LGUs.
- Experience with social protection systems, cash transfers, health, education, WASH, child protection, or other child-focused programming is an asset.
- Experience with UNICEF or other UN agencies is an advantage.
- Commitment to UNICEF core values of care, respect, integrity, trust, accountability, and sustainability.