26 September 2025
Sefanaia Nawadra
Director General
SPREP
Apia, Samoa

Dear Sefanaia,

Subject: Notification of Approval – Weather Ready Pacific Implementation Plan Version 2

On behalf of the Weather Ready Pacific Steering Committee, I am pleased to inform you that the Weather Ready Pacific (WRP) Implementation Plan Version 2 was formally discussed and approved during the Third Steering Committee Meeting held in Honiara, Solomon Islands, on 26 September 2025.

The Steering Committee acknowledges the significant efforts undertaken by the Programme Management Unit and SPREP in preparing the updated implementation plan. The Committee is confident that the revised plan provides a strong foundation for the continued implementation of the WRP Programme and aligns with the strategic objectives of enhancing weather and climate resilience across the Pacific region.

We look forward to SPREP's continued leadership and collaboration in advancing the implementation of the WRP Implementation Plan Version 2.

Please find the approved version of the Weather Ready Pacific Implementation Plan attached for your records.

Yours sincerely,

Misaeli Funaki
Chairman
Weather Ready Pacific Steering Committee

Weather Ready Pacific
Implementation Plan

Version 2

PACIFIC
METEOROLOGICAL
COUNCIL

Weather Ready Pacific

Implementation Plan

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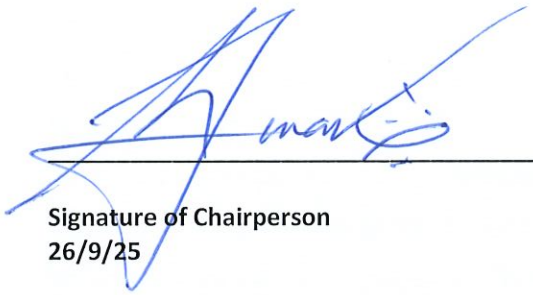
PACIFIC METEOROLOGICAL COUNCIL

Weather Ready Pacific

Version History

Version History

Date	Version	Description	Approver
20/9/24	1	Published as v2	Steering Committee
26/9/25	2	Consolidated to single implementation plan	Steering Committee



Signature of Chairperson
26/9/25

Abbreviations

AUD	Australian dollars
EW4ALL	Early Warning for All
GEDSI	Gender equality, disability and social inclusion
IFRC	International Federation of Red Cross and Red Crescent Societies
ITU	International Telecommunication Union
KRA	Key result area
NDMO	National Disaster Management Organisation
NMHS	National Meteorological and Hydrological Services
PIFS	Pacific Islands Forum Secretariat
PMC	Pacific Meteorological Council
PMU	Project Management Unit
SPREP	Secretariat of the Pacific Regional Environment Programme
UNDRR	United Nations Office for Disaster Risk Reduction
USD	Unites States dollars
WMO	World Meteorological Organisation
WRP	Weather Ready Pacific

1. Introduction

Pacific islands are vulnerable to a wide range of weather, climate, hydrological, oceanic and other related environmental extreme and high impact events, including tropical cyclones and typhoons, strong winds, earthquakes, volcanic eruptions, drought, coastal inundation (including storm surges, high waves, ocean swell, and tsunami), high rainfall and floods.

Further, the risks posed by extreme events are increasing as the Pacific region is particularly vulnerable to climate change and it is likely that extreme events will become more intense and/or frequent in the coming decades. Pacific islands will be significantly affected by sea level rise, which will greatly increase the risks posed by coastal inundation events. Climate change and disaster risks undermine the ability of the Pacific region to reach the Sustainable Development Goals.

In 2021, Pacific Leaders endorsed the Weather Ready Pacific (WRP) Decadal Programme of Investment, which seeks to reduce the human and economic costs of severe weather, water and ocean events across Pacific island communities, by strengthening national meteorological and hydrological organisations and their partnerships with national disaster management organisations. This programme of investment ensures that the Pacific participates in and benefits from advances in forecast and warning systems that should ultimately enable increased accuracy, geographic specificity and lead time of forecasts.

This document presents an implementation plan for WRP starting in 2024 through to 2033.

2. Methodology for the Preparation of the Implementation Plan

The original implementation plan v1 was prepared by a consultant in discussion with NMHS directors, development partners, PMC panels, PMC secretariat, SPREP, SPC and other stakeholders. It was endorsed by PMC in Oct 2023.

This implementation plan v2 has been updated by the Weather Ready Pacific Programme PMU. This update is designed to provide clarity on activities to assist execution and incorporates MERL framework development.

Going forward the intention is for the implementation plan to be revised routinely by the PMU to reflect any:

- New funding secured and allocated against WRP activities
- New transformative action roadmaps developed to tackle complex sustainability challenges
- Updates to the WRP Decadal Investment Plan and new/revised activities
- Steering Committee, PMC decisions and change requests

An initial risk assessment for WRP Programme was undertake in 2021 and further expanded on in 2023 as part of development of the original implementation plan. This has now been updated and transferred into a risk register (***Annex 1***) and this will be regularly updated by PMU and tabled to WRP Steering Committee who is responsible for risk management.

3. Programme Description

3.1 Scope of Weather Ready Pacific

The **Overall Objective** for the WRP has been refined in 2025 to be: *Climate and disaster resilient Pacific Island communities have improved safety, security, socio-economic well-being and prosperity*. The **Specific Objective** of WRP has been refined in 2025 to: *Pacific communities, governments and industries have inclusive multi-hazard early warning systems, forecasts, and information to reduce the impact of extreme weather and other natural hazard events, including those exacerbated by climate change*.

The 2021 WRP Decadal Programme of Investment initially identified key result area (KRA). These have now been refined and reordered to better reflect the scope of, and logic underpinning WRP activities. The KRAs have also been expanded to include a sixth KRA to improve alignment with the United Nations Early Warnings for All initiative (section 3.2) and improve connection into the wider MHEWS sector. These KRAs are summarised in the table below. The new **WRP Impact Pathway** (presented visually in **Appendix 1**) logically frames how the proposed outputs within each KRA area are anticipated to lead to intermediary outcomes. The pathway then demonstrates how WRP will influence the achievement of the outcomes and impacts sought. This pathway embodies the four updated WRP principles:

- **Pacific-led and owned:** Driven by Pacific peoples; Responsive to local needs, cultural contexts; Integrating traditional knowledge; Harmonised (local, national, regional, global).
- **Inclusive, equitable and empowering:** Rights-based; Gender equality, disability and socially inclusive (GESDI)-responsive; Active, meaningful participation; Precautionary.
- **Collaborative:** Mutually accountable and transparent; Coordinated; Partnership-based.
- **Transformative and Sustained:** Visionary; Structural and systemic; Agile; Enduring.

Each activity outlined in this Implementation Plan is to be designed and delivered in a manner consistent with these principles.

KRA 1 Governance, Management and Coordination

This covers the establishment of a fully resourced Project Management Unit, support for travel, operations, consultations, communications, annual WRP steering committee meetings (virtual and face-to-face) and support for PMC Biennial meetings. Support for start-up secondments or consultancies for start-up and planning activities during inception are included.

KRA 2 People Capability

(previously KRA 5 Capacity and Training)

This covers the establishment of a regional training centre for observers, technicians and IT specialists; training of forecasters to a BIP-M standard; hydrology and hydrography training, professional workshops, twinning programmes and leadership training for mid and senior level NMHS staff.

KRA 3 Observation Network Infrastructure

(previously KRA 4 Infrastructure)

This covers the enhancement of hydro-meteorological observation infrastructure networks and associated information technology (IT) including automatic weather stations, automated upper air observation stations, weather watch radars, river and tide gauges, wave buoys, data servers; asset management capability uplift and the establishment of an equipment calibration centre.

KRA 4 Forecasts and Warnings Production

(previously KRA 2)

This covers the development of an integrated forecasting platform, suite of automated meteorological, hydrological and oceanographic forecast and warning products; an enhanced data delivery system - the Pacific Weather Exchange; coastal inundation and riverine flood forecasting; provision of additional staff in NMHSs to support ICT and communications; and strengthened aviation weather forecasts.

KRA 5 Communication and Delivery of Forecasts and Warnings to End-users

(previously KRA 3)

This involves the close collaboration with NMHS, National Disaster Management Organisations (NDMOs) and EW4ALL/MHEWS partners to prepare and deliver impact-based, location specific warnings, based on assessments and modelling, and incorporating traditional knowledge.

KRA 6 Hazard Risk Information and Preparedness

(new)

This focuses on the roles and responsibilities within the NMHSs in integrating interoperable multi-hazard data inputs alongside vulnerability and exposure data into creating risk information and knowledge products, and increasingly having this reflected within response plans and procedures. It also covers awareness campaign in which the NMHSs are involved in.

3.2 Delivery of Early Warning for All

EW4ALL is a global initiative to ensure that everyone on Earth is protected from hazardous weather, water, or climate events through life-saving early warning systems by the end of 2027.

The EW4ALL Action Plan calls for investments of USD 3.1 billion over five years. It leverages existing pooled funding mechanisms, such as the Climate Risk and Early Warning Systems initiative and the Systematic Observations Financing Facility, as well as global multilateral funds including the Green Climate Fund and the development banks.

The EW4ALL initiative is co-led by the World Meteorological Organization (WMO) and the United Nations Office for Disaster Risk Reduction (UNDRR), with support from the International Telecommunication Union (ITU), the International Federation of Red Cross and Red Crescent Societies (IFRC) and other partners.

The initiative has four pillars:

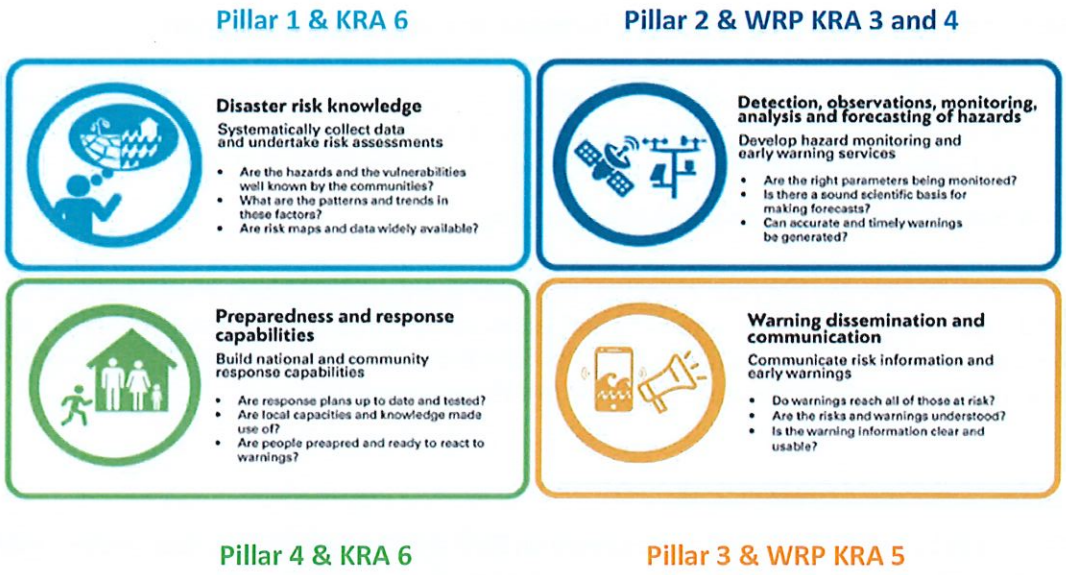
PILLAR 1 Ensuring all countries have access to reliable, understandable and relevant risk information, science and expertise (led by UNDRR).

PILLAR 2 Ensuring all countries have robust forecast and monitoring systems (both soft and hardware infrastructure) and enabling policies to support optimization and sustainability of hazard monitoring and early warning systems (led by WMO).

PILLAR 3 Using a people-centred approach to ensure that early warnings are effectively and timely disseminated to reach everyone, especially those most at risk (led by ITU).

PILLAR 4 Ensuring local governments, communities and individuals at risk have the knowledge and means to take pre-emptive early actions to prepare for and respond to incoming disasters upon receiving warnings (led by IFRC).During the PMC-6 meeting, August 2023, WRP was endorsed as the key vehicle for implementation of the EW4ALL initiative in the Pacific region.

A review of WRP for alignment with EW4All was undertaken and recommendations were approved by Steering Committee May 2025. This included the expansion for additional KRA 6 Hazard Risk Information and Hazard Preparedness (Pillar 1 and 4), and additional hazards. An update of the Decadal Investment Plan will be prepared to be tabled for endorsement by Steering Committee and PMC, and recommended activities will then subsequently feed into an update to the Implementation Plan.



4. Implementation Plan

The Implementation Plan of activities supporting the outcomes and key results areas are presented on the following pages.

- Overall WRP, 2024 – 2033
- WRP Phase 1, 2024 – 2029
- WRP Inception Phase, November 2023 - December 2024

The overall indicative costs based on the WRP decadal investment plan and the funded work plan is summarised in the table below.

Key Result Area (KRA)	Inception Phase Indicative USD m	Phase 1 Indicative Cost 2024 – 2029 USD m	Overall Indicative Cost 2024 - 2033 USD m	Work Plan Funding 2024-2029 USD m
KRA 1: Governance, Management and Coordination	2.34	10.15	20.31	8.06
KRA 2: People Capability (previously *KRA 5 Capacity and Training)*	0.33	5.48 *(prev. 5.38)*	20.64 *(prev. 20.44)*	3.08
KRA 3: Observing Network Infrastructure *(previously KRA 4 Infrastructure)*	3.55	9.88 *(prev. 10.58)*	89.16 *(prev. 96.38)*	10.56
KRA 4: Forecasts and warning production *(previously KRA 2)*	0.30	9.00 *(prev. 8.30)*	45.76 *(prev. 38.54)*	5.54
KRA 5: Communication and delivery of forecasts and warnings to end-users *(previously KRA 3)*	0.86 *(prev. 0.96)*	2.56 (prev. 2.66)	9.52 *(prev. 9.72)*	0.63
KRA 6: Hazard Risk Information and Hazard Preparedness *(new)*				
Contingency & other	0.33	3.00	5.56	0.75
TOTAL	**7.71**	**40.07**	**190.95**	**28.61**

The key changes incorporated in this updated version of the Implementation Plan v2 are:

- Revisions in KRAs numbering and descriptors as part of the MERL framework development.
- Simplifying from three to one implementation plan for the 10 years.
- New and refined activities added from the transformative action roadmaps for sustainable financing, asset management and GESDI.
- Some activities have been disaggregated/consolidated and new activities added to better communicate the MERL outputs and intermediate outcomes. For example:
    - ICT infrastructure associated with Integrated Forecasting Platform consolidated into one activity in KRA 4
    - All training transferred and consolidated under KRA 2
    - Investment in additional capacity/staff in particular is now highlighted as distinct separate activities under each KRA.

- Activities are described in more detail descriptions to assist execution.
- Activities reflect the original decadal investment plan, recent decisions from PMC, PMC Panels and the latest information available.
- Overall indicative decadal investment cost has not been changed however costs have shifted between KRAs.

The WRP funded work plan for activities between 2024-2029 is now also included in this Implementation Plan for Steering Committee endorsement. Noting:

- All contracted Donor Funds and Technical Assistance Funds to WRP is included.
- Work Plan Funding excludes 15% SPREP overhead.
- Budgeted SPREP staff cost of USD 6.7 Mill is based on standard SPREP rates (see **Appendix 2**). This is expected to be 30-50% higher than actual expenditure. This buffer of USD2-3 Mill will serve as a contingency budget for WRP, with unspent funds each year reallocated to implementation activities in subsequent years.
- Staff are those directly recruited into SPREP. This is separate to secondments or technical assistance resources.
- WRP funding assumes a foreign exchange rate for future tranches of funding not yet received by WRP. This is subject to change and the implementation plan will be updated accordingly as tranches of funding is received in USD.
- A Multi-hazard Early Warning Readiness Funding (flexi-fund) was approved by Steering Committee in May 2025. Annual allocation of USD150k has been provisioned sitting under "Contingency and Other" until requests from countries are approved by PMU and budget reassigned to the relevant WRP activity and output.

KRA	Activity	Indicative Cost USD '000 2024 - 2033	Work Plan Funding USD '000 2024 - 2029	2024	2025	2026	2027	2028	2029
KRA 1 GOVERNANCE, MANAGEMENT AND COORDINATION		**20,310**	**8,057**	**1,523**	**1,307**	**1,537**	**1,352**	**1,199**	**1,139**
Output 1.1 WRP governance, management and financing mechanisms established, mandated and equipped to coordinate a Pacific-led, integrated, and sustainable programme									
1.1.1	Establish the PMU, Operational Processes and WRP pooled fund	550	356	0	256	100	0	0	0
1.1.2	Operational Phase of PMU and coordination activities	1,470	2,622	1,441	344	379	224	146	86
1.1.3	MERL framework establishment and operationalisation	incl above	133	0	58	0	75	0	0
1.1.4	PMU Staff (Management and Delivery Support roles)	18,290	4,725	82	434	1,052	1,052	1,052	1,052
1.1.5	NMHS Staff to expand capacity to support programme delivery	new	0	0	0	0	0	0	0
Output 1.2 Sustainable hydrometeorological financing facility and resource mobilisation approach established and operational									
1.2.1	Sustainable hydrometeorological financing investment facility	new	0	0	0	0	0	0	0
Output 1.3 Transformative GEDSI strategy adopted and integrated across governance, management and partner programming									
1.3.1	GEDSI and social safeguards mainstreamed into WRP	incl above	221	0	215	6	0	0	0
1.3.2	Cultivating a diverse and GEDSI responsive hydrometeorological service and warning institutions	new	0	0	0	0	0	0	0
KRA 2 PEOPLE CAPABILITY *(previously KRA 5 Training and Capacity)*		**20,640**	**3,080**	**228**	**1,288**	**814**	**423**	**163**	**163**
OP2.1 WMO-designated Pacific Regional Training Centre established and sustainably managed									
2.1.1	Establish and operate a Regional Training Centre (RTC)	920	238	0	203	35	0	0	0
OP2.2 Inclusive leadership and technical capability strengthening programmes established and delivering ongoing training to industry standards									
2.2.1	Training of forecasters to BIP-M standard	2,700	812	7	351	273	180	0	0
2.2.2	Training on specialised forecasting services, and assessment of competencies (e.g. marine, aviation, hydrology/ hydrography)	2,440	160	0	80	0	80	0	0
2.2.3	Training of observers, technicians and ICT specialists, and assessment of competencies	3,240	296	0	148	148	0	0	0
2.2.4	Establish and deliver a Pacific Meteorology Leadership Programme for mid and senior level staff	1,040	135	0	0	135	0	0	0
2.2.5	Specialised regional workshops and training courses	9,330	207	0	150	57	0	0	0
2.2.6	Provide additional staff for training and capacity development	new	742	0	86	166	163	163	163
OP2.3 Continuous learning and mentoring opportunities provided									
2.3.1	Twinning programme, ongoing mentoring and communities of practices	970	490	221	269	0	0	0	0
KRA 3 OBSERVATION NETWORK INFRASTRUCTURE *(previously KRA 4)*		**89,160**	**10,563**	**1,906**	**767**	**6,142**	**1,128**	**310**	**310**
Output 3.2 WMO-designated Pacific Regional Instrument Centre established and sustainably managed									
3.2.1	Establish and operate a Regional Instrument Centre (RIC)	1,860	51	0	0	51	0	0	0
Output 3.1 Interoperable, affordable and resilient observation network progressively remediated, expanded and sustained									
3.1.1	Implement observation network plans, asset management, standardised infrastructure, data management and maintenance practices	1,000	977	0	386	461	110	10	10
3.1.2	Provide asset management and maintenance staff to expand capacity (e.g. SPREP, SPC, NMHS)	470	1,074	0	41	163	290	290	290
3.1.3	Revitalise and expand automatic and manual weather	11,340	1,500	0	0	1,000	500	0	0
3.1.4	Revitalise and expand river gauges and rain gauges	8,050	0	0	0	0	0	0	0
3.1.5	Establish weather watch radars	11,650	6,962	1,906	340	4,468	228	10	10
3.1.6	Revitalise and expand wave buoys	19,750	0	0	0	0	0	0	0
3.1.7	Revitalise and expand tide gauges	13,930	0	0	0	0	0	0	0
3.1.8	Revitalise and expand Meteorological balloon launching systems	20,520	0	0	0	0	0	0	0
3.1.9	Data capture from aircraft observation using the aircraft meteorological data relay system	590	0	0	0	0	0	0	0

KRA	Activity	Indicative Cost USD '000 2024 - 2033	Work Plan Funding USD '000 2024 - 2029	2024	2025	2026	2027	2028	2029
KRA 4 FORECAST AND WARNING PRODUCTION *(previously KRA 2)*		**45,760**	**5,536**	**386**	**1,550**	**1,417**	**1,042**	**970**	**170**
Output 4.1 An integrated Pacific forecasting platform established and operating sustainably to global standards									
4.1.1	Develop an Integrated Forecasting Platform and strengthen RSMCs (incl WIS, CAP)	18,220	2,557	55	105	797	800	800	0
OP4.2 Pacific forecasting capacity expanded and maintained									
4.2.1	Strengthen aviation forecasting	1,980	30	0	0	30	0	0	0
4.2.2	Strengthen public forecasting	6,930	598	331	267	0	0	0	0
4.2.3	Strengthen marine forecasting	incl above	0	0	0	0	0	0	0
4.2.4	Strengthen coastal inundation forecasting	12,250	1,191	0	966	153	72	0	0
4.2.5	Strengthen hydrological services and riverine flood forecasting	incl above	93	0	0	93	0	0	0
4.2.6	Provide additional ICT and other technical staff to expand capacity	6,380	1,067	0	213	344	170	170	170
KRA 5 COMMUNICATION AND DELIVERY OF FORECASTS AND WARNINGS TO END USERS *(previously KRA 3)*		**9,520**	**626**	**0**	**179**	**210**	**75**	**0**	**163**
Output 5.1 Pacific capacity and collaborative approaches to deliver locally-relevant, impact-based, inclusive and accessible forecasts and warnings for end users strengthened and sustained									
5.1.1	Planning for delivery of impact-based messages and warnings to end-users, considering persons with disabilities and vulnerable groups.	660	75	0	0	0	75	0	0
5.1.2	Prepare impact-based, location specific warnings, based on assessments and modelling, and incorporating traditional knowledge	3,930	0	0	0	0	0	0	0
5.1.3	Deliver and continuously review impact based messaging including translation into local languages	4,430	0	0	0	0	0	0	0
5.1.4	Inclusive Community Education and Information-Exchange collectives	incl above	207	0	105	102	0	0	0
5.1.5	Develop innovative approaches for dissemination of forecasts and warnings to end-users (e.g. cell broadcasting, mobile apps, social media)	incl above	24	0	24	0	0	0	0
5.1.6	Install communication internet access equipment and operational costs	500	158	0	50	108	0	0	0
5.1.7	Provide additional staff for warning communication and engagement to expand capacity	new	163	0	0	0	0	0	163
KRA6 RISK INFORMATION AND PREPAREDNESS *(new)*		**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
OP6.1 Standardised, interoperable and inclusive multi-hazard data produced, stored and shared with resilience partners									
	TBD by decadal investment plan to align with EW4All								
OP6.2 Roles and responsibilities established for coordinating, updating, and reviewing hazard inputs into risk knowledge products, preparedness and response plans and procedures									
	TBD by decadal investment plan to align with EW4All								
CONTINGENCY AND OTHER		**5,560**	**750**	**0**	**150**	**150**	**150**	**150**	**150**
GRAND TOTAL (excl. SPREP program fees)		**$190,950**	**$28,612**	**$4,044**	**$5,241**	**$10,270**	**$4,169**	**$2,792**	**$2,095**

Note: **Blue text** represents changes from the original Implementation Plan v1.

A more **detailed work plan by projects** under each activity can be found in **Annex 2.**

A change register can be found in **Annex 3,** as a record of change since last version of the approved Implementation Plan.

KRA 1 Governance, management and coordination

Outcomes:

O1 - Pacific hydrometeorological services collectively securing ongoing, reliable and diverse finance and technical expertise

Output 1.1: WRP governance, management and financing mechanisms established, mandated and equipped to coordinate a Pacific-led, integrated, and sustainable programme

Anticipated Intermediary Outcomes:

IO1.1 WRP governance, management, financing and coordination mechanisms are collaborative, inclusive, equitable, mutually accountable and value maximising

IO1.3 Investor confidence in Pacific-led development and management of hydrometeorological services increased

1.1.1 Establish the PMU, Operational Processes and WRP Pooled Fund

A centralised Programme Management Unit (PMU) will enable strategic oversight, accountability, and efficient coordination of Weather Ready Pacific activities. By establishing robust operational processes and a pooled funding mechanism, the program ensures streamlined resource allocation, donor alignment, and long-term financial stability.

Implementation Tasks:

- Define the PMU's workforce need, structure, responsibilities and governance model in consultation with stakeholders.
- Establish physical facilities, legal and financial instruments within SPREP
- Establish a multi-donor pooled fund with clear criteria for contributions, fund access, and fiduciary controls.
- Develop branding and communication strategy, knowledge management systems and resource mobilisation strategy.
- Set up program planning and review mechanisms involving key partners (e.g., SPREP, Steering committee, PMC, Panels, technical partners, WMO, UNDRR, SPC).
- Develop templates and tools for programme tracking, reporting and M&E compliance. Develop an Operational Manual with Standard Operating Procedures (SOPs) for programme governance, project management and delivery, financial management, procurement, Monitoring, Evaluation, Research and Learning (MERL) Framework, reporting, risk management, GEDSI, social and environmental safeguarding and inter-agency coordination.

1.1.2 Operational Phase of PMU and coordination activities

The operational PMU will serve as the program's central coordination engine, ensuring timely delivery, alignment with national and regional priorities, and consistent stakeholder engagement. It will adaptively manage risks and leverage partnerships to maximize regional impact and sustainability.

Implementation Tasks:

- Onboard staff for technical, operational, and administrative support roles.
- Maintain a coordination event calendar
- Facilitate cross-KRA and multi-country coordination to align activities and avoid duplication for great impact in the region.

- Assessing project concept designs and MHEW readiness fund proposals, manage executing agency contracts and relationship management.
- Overarching financial management and executing work per the Operations Manual.
- On-going fund raising and execution of resource mobilisation strategy.
- Organize virtual or in-person meetings and workshops with NMHSs, NDMOs, donors, technical partners, multi-hazard early warning stakeholders etc to align regional and national priorities.
- Maintain internal knowledge management, external communication channels and risk/issue-tracking systems.
- Conduct bi-annual steering committee meetings

1.1.3 MERL Framework Establishment and Operationalisation

The WRP monitoring, evaluation, research and learning (MERL) Framework provides a pathway to test assumptions, track progress, share achievements, research solutions, reflect and apply lessons learnt to achieve the programme objectives and intended outcomes and impacts.

Implementation Tasks:

- Develop the MERL Framework comprising the Impact Pathway, MERL results tables and MERL workplan; collect baseline and set targets.
- Develop, deliver and refine MERL and reporting systems, tools, guides and processes.
- Overall management, coordination, implementation and regular review of MERL Framework.
- Commission WRP staged evaluations, 2027, 2030 and 2033.
- Provide technical MERL-related advice, guidance, institutional strengthening and capability building to WRP implementing and executing agencies.
- Coordinate reflection and knowledge sharing.
- Prepare WRP reports and knowledge products.
- Data management of WRP MERL data.

1.1.4 PMU Staff (Management and Delivery Support roles)

Hiring qualified staff for non-delivery roles (e.g., finance, communications, knowledge management, GEDSI, ESS, MERL, IT, resource mobilisation) will ensure strong internal governance, transparent reporting, and strategic engagement, delivery support allowing delivery teams to focus on technical execution.

Implementation Tasks:

- Implement competitive and transparent recruitment processes.
- Develop internal onboarding and orientation materials for PMU staff, and clear roles and responsibilities.

Appendix 2 contain the budgeted staff costs for PMU and delivery roles.

1.1.5 NMHS staff to expand capacity to support programme

Expanding NMHS staff capacity will ensure local implementation of WRP activities, promote knowledge ownership, and create a foundation for continuity after programme completion.

Implementation Tasks:

- Conduct workforce needs assessments in NMHSs to identify staffing gaps.
- Create staffing plans that prioritize roles in forecasting, infrastructure maintenance, communications, and data management.
- Secure budget and approvals for new positions in partnership with national governments and recruit into roles.
- Plan technical and operational training for new hires — **execution under KRA 5.**

Output 1.2: Sustainable hydrometeorological financing facility and resource mobilisation approach established

Anticipated Intermediary Outcomes:
IO1.2 Pacific hydrometeorological services generating regular and sustainable returns on investment

1.2.1 Sustainable hydrometeorological financing investment facility

This investment facility will ensure long-term financial support for hydrometeorological services, covering infrastructure maintenance, staffing, and forecasting tools beyond the lifespan of the WRP.

Implementation Tasks:

- Undertake optioneering, stakeholder engagement, suitability, feasibility and risk assessments and relevant financial stress testing of available investment structures (e.g., including, but not limited to, endowment fund, blended finance, partnering with investor/development bank) to recommend an investment facility model.
- Consult with Pacific Infrastructure Resilience Facility, other existing funds, ministries of finance, development banks, and private-sector actors.
- Align with national climate finance strategies and NDCs and consider intersections with accredited entities for access to GCF or similar mechanisms.
- Design operational guidelines and institutional governance structures for the facility, appropriate for the selected domicile and WRP.
- Establish a monitoring system to ensure transparency and effectiveness in fund disbursement.
- Resource mobilisation and fund raising strategy considering all avenues, including private industry funding, donors investments and national country budgets.
- Ensure implementation is underpinned by strong evidence-based approach and financial modelling from asset management planning (see 3.1.1)

This activity has been added in line with the approved Roadmap for Sustainable Financing and Asset Management.

Output 1.3: Transformative GEDSI strategy adopted and integrated across governance, management and partner programming

Anticipated Intermediary Outcomes:

IO1.1 WRP governance, management, financing and coordination mechanisms are collaborative, inclusive, equitable, mutually accountable and value maximising

IO1.3 Investor confidence in Pacific-led development and management of hydrometeorological services increased

1.3.1 GEDSI and social safeguards mainstreamed into WRP

Our approach recognises mainstreaming as a crucial part of the approach in WRP's GEDSI strategy and is embedded across all WRP programs. This will ensure that the Weather Ready Pacific Programme and all related activities are inclusive, equitable, and accessible to all individuals, particularly Pacific women and girls in all their diversity, and other vulnerable, under-served and under-represented groups. Mainstreaming and the process of integrating the concerns and experiences of women and men into the design, implementation, monitoring, and evaluation of all policies and programs and is a continuous process in WRP, aimed at ensuring that inequality is not perpetuated, that all WRP activities benefit all population groups and that risks are managed proactively.

Implementation Tasks:

- Policy and institutional integration – integrate GEDSI principles into the core policies, procedures, strategic planning and operational practices pf WRP and relevant institutions. Review national and regional GEDSI and safeguard policies and integrate relevant principles into WRP documents.
- Programmatic Integration – systematically integrate GEDSI across all WRP programming. GEDSI Project and programme appraisal checklists to be used to ensure all WRP projects are GEDSI responsive and adhere to the strategy.
- Governance – integrate GEDSI considerations into all program governance structures, committees and decision-making processes to ensure an inclusion lens is applied at every level.
- Training and capacity-building – Provision of mandatory, ongoing, and tailored training on GEDSI, intersectionality for all WRP staff, partners and key stakeholders **training under KRA 5**.
- Data and analysis – routinely collect, analyse disaggregated data by sex, age, disability, location, ethnicity and socio-economic status to inform all WRP activities and ensure transparent reporting.
- Social Safeguards - Develop a Social Safeguards Framework, inclusive of community feedback and grievance redress mechanisms that are safe, confidential, and accessible to vulnerable groups.

1.3.2 Cultivating a diverse and GEDSI responsive hydrometeorological service and warning institutions

Meteorological and hydrological institutions that are gender-diverse, disability-inclusive, and socially responsive will be better positioned to serve diverse user needs, build trust, and uphold human rights in climate and disaster services. Institutional reforms will transform policies, leadership practices, and accountability mechanisms — ensuring that inclusivity is embedded not just in services but also in how those services are designed, governed, and resourced.

Implementation Tasks:

- Conduct GEDSI institutional audits in NMHSs and partner agencies to identify structural barriers, workplace inequalities, and policy gaps.
- Inclusive talent pipeline by strengthening GESDI-inclusive hiring, education, training, staffing and operational practices.
- Develop or update institutional policies (e.g. HR, outreach, data ethics, service standards) to mainstream GEDSI principles and disability accessibility.
- Establish GEDSI focal points or committees within NMHSs and ensure their representation in decision-making processes.
- Develop GEDSI-inclusive service charters and internal accountability frameworks, including KPIs for outreach, accessibility, and staff diversity.
- Engage civil society groups (e.g. OPDs, women's organisations, youth councils) in reviewing policies and shaping institutional change priorities.
- Incorporate GEDSI performance indicators into program monitoring, funding agreements, and staff performance evaluations.
- Align reforms with national disability acts, gender equality policies, and Pacific regional frameworks (e.g. Pacific Leaders Gender Equality Declaration, Incheon Strategy).

KRA 2 People Capability *(previously KRA 5 Training & Capacity)*

Outcomes:

O1 - Pacific hydrometeorological services collectively securing ongoing, reliable and diverse finance and technical expertise

O2 - Pacific hydrometeorological services have increasing influence in national, regional and multilateral settings

Outputs 2.1 WMO-designated Pacific Regional Training Centre established and sustainably managed
Anticipated Intermediary Outcomes: *IO2.1 Training services increasingly Pacific-based and integrating Pacific learning methods*

2.1.1 Establish and operate a Regional Training Centre (RTC)

The RTC will serve as the hub for delivering standardised, accredited training across the Pacific against a competency framework for NMHSs. It will provide in-region education pathways for forecasters, observers, technicians, ICT specialists, and managers, reducing dependence on overseas programs and ensuring training is aligned with Pacific-specific operational contexts and hazards.

Implementation Tasks:

- Identify and establish a host institution (e.g. Fiji Met, USP) with an agreed business operating model, revenue model, appropriate governance arrangement, infrastructure and administrative capacity.
- Develop a pacific training and capacity development roadmap.
- Develop competency and curriculum frameworks aligned with appropriate standards (e.g., WMO BIP-M, BIP-MT) and NMHS operational requirements.
- Equip the RTC with necessary facilities, including classrooms, online training labs, and simulation environments, learning and development platform, web presence etc.
- Establish accreditation pathways for courses with relevant education authorities.
- Hire and train RTC instructors locally and engage guest trainers externally.
- Develop a training calendar, including foundational and refresher modules driven by requirements and demand of the hydrometeorological community.
- Integrate GEDSI principles into course content and participant selection.
- Implement systems to track participant progress, certification, competencies

Outputs 2.2 Inclusive leadership and technical capability strengthening programmes established and delivering ongoing training to industry standards

Anticipated Intermediary Outcomes:

IO2.1 Training services increasingly Pacific-based and integrating Pacific learning methods

IO2.2 Skills, knowledge and confidence of NMHS personnel increased

IO2.3 Retention of staff and capacity within the sector improved

2.2.1 Training of forecasters to BIP-M standard

This training pathway will ensure that Pacific forecasters meet the minimum WMO standards for competency, including the ability to interpret NWP outputs, issue forecasts and warnings, and communicate with end-users. It will contribute to long-term workforce development and operational sustainability.

Implementation Tasks:

- Develop or adopt a modular BIP-M curriculum tailored to Pacific Island operations, including cyclone forecasting and marine hazard specialisations (***under 2.2.2***).
- Deliver both online and in-person instruction.
- Conduct annual intakes based on regional needs and succession planning.
- Provide assessment tools to verify learning outcomes and issue certifications.
- Provide support (i.e. tutoring, refresher training, bridging subjects), mentorship and supervised practice for new forecasters via twinning or internships (***under 2.3.1***)
- Integrate GEDSI principles into participant selection and support

2.2.2 Training on specialised forecasting services and assessment of competencies

Specialised training in marine, aviation, hydrology (e.g. BIP-H), and severe weather forecasting will enable NMHS staff to deliver sector-specific services to high-risk communities and critical industries.

Implementation Tasks:

- Identify staff candidates working in marine, aviation, or hydrological roles across the region.
- Deliver specialised courses on marine meteorological services, aviation weather codes, and hydrological modelling tools (e.g., HEC-HMS, SWAN, TAF/SIGMET procedures).
- Diploma and postgraduate certificate training in hydrography and hydrology
- Develop scenario-based training and case studies focused on Pacific region events.
- Competency based training and Integrate practical fieldwork or simulations (e.g., marine search and rescue, TC, volcanic ash events).
- Competency assessments and maintain a regional database of staff competencies.
- Provide refresher training every 2–3 years to maintain operational readiness.

2.2.3 Training of observers, technicians and ICT specialists, and assessment of competencies

A skilled technical workforce will ensure the reliability of observations, the functionality of infrastructure, and the security of data and communication systems. This is critical for the operational success of forecasting, early warning, and data sharing systems.

Implementation Tasks:

- Develop training curricula for surface weather observers (e.g. BIP-MT), radar technicians, AWS installers, and ICT staff (e.g., server administration, network security).
- Establish standard regional qualifications and WMO-aligned competency profiles.
- Deliver foundational and refresher training through the RTC and online platforms.
- Conduct field training in station maintenance, sensor calibration, and fault diagnosis.
- Competency assessments and maintain a regional database of certified specialists.
- Coordinate with KRA 4 to align training with actual equipment types and operational needs.

2.2.4 Establish and deliver a Pacific Meteorology Leadership Programme for mid and senior level staff

A regional leadership program will build strategic thinking, communication, policy engagement, and management skills among mid- and senior-level staff in NMHSs. This supports succession planning, strengthens governance, and improves institutional resilience.

Implementation Tasks:

- Design a Pacific Meteorological Leadership Program incorporating international and pacific frameworks, delivered biennially.
- Potential focus topics on governance, finance, workforce planning, communication, project management, international negotiations, strategic planning and GEDSI leadership.
- Deliver the program in cohorts of 10–20 leaders through residential intensives, online modules, and practical projects.
- PICTs to nominate emerging leaders for each intake.
- Partner with institutions and service providers (e.g. USP, FNU) for curriculum delivery and mentoring.

2.2.5 Specialised regional workshops and training courses

Targeted workshops and short courses will address specific technical and institutional needs emerging from KRA implementation, ranging from forecasting innovations to data systems and institutional standards.

Implementation Tasks:

- Develop and deliver annual training workshops in:
  - Quality Management Systems (QMS)
  - WMO CAP, WIS, IT systems, WIPPS
  - Asset management
  - Data and metadata management and systems
  - Forecast dissemination, communications and social media use (KRA 3)
  - Oceanography portals, OSCAR, WIGOS, RBSN/GBON
  - Climate services
  - Satellite (e.g. VLab)
  - ICT and programming
  - GEDSI mainstreaming and safeguards
  - Sustainability and ESS

- Programme/project management and MERL

- Offer certification and post-training resource kits, and integrate into RTC training programs and competency frameworks where appropriate.
- Link training topics to operational priorities and gaps identified through M&E reviews.
- Coordinate with PMU and KRAs 2–4 to ensure demand-driven content.

2.2.6 Provide additional staff for training and capacity development

Sufficient competent staff for training and capacity development in hydro-meteorological services, particularly as part of the RTC and regional institutes, will increase pacific capacity to tailor training for local requirements with less external dependency.

Implementation Tasks:

- Assess workforce needs for RTC, across NMHSs and regional institutions
- Recruit into roles in those organisations
- Establish professional development and career pathways for these roles, including accredited training programs, communities of practice and twinning — **training execution under KRA 2**.
- Ensure diversity and inclusion in hiring, promoting GEDSI representation in technical roles.

Output 2.3: Continuous learning and mentoring opportunities provided
Anticipated Intermediary Outcomes: *IO2.2 Skills, knowledge and confidence of NMHS personnel increased*   *IO2.3 Retention of staff and capacity within the sector improved*

2.3.1 Twinning programme, ongoing mentoring and communities of practices

Sustained peer-to-peer learning and professional networks will support long-term skill retention, operational confidence, and innovation diffusion. Twinning between Pacific NMHSs and international partners also provides exposure to global good practices. Increase pathways into NMHSs through partnerships.

Implementation Tasks:

- Identify opportunities to establish formal twinning partnerships between Pacific NMHSs and institutions such as BoM, JMA, NOAA, or Earth Sciences New Zealand (and subsidiary NZ MetService).
- Identify opportunities for twinning assignments (e.g., forecast desk placements, maintenance missions, co-developing SOPs).
- Create "communities of practice" (e.g. forecasters, technicians) using virtual collaboration tools and in-person events.
- Secondments and Train the trainer arrangements to provide mentorship, regular check-ins, joint webinars, and knowledge-sharing sessions.
- Partner with institutes to promote career pathways into NMHSs through structured support programs - **links with Activity 5.1.4**

KRA 3 **Observation network infrastructure** *(previously KRA 4 Infrastructure)*

Outcomes:

O3 - Pacific hydrometeorological services using and sustaining a growing Pacific-owned and controlled asset, data and knowledge base for public benefit

Outputs 3.1 Interoperable, affordable and resilient observation network progressively remediated, expanded and sustained
Anticipated Intermediary Outcomes: *IO3.1 Observation, monitoring and detection systems and real-time data supply expanded and enhanced* *IO3.2 Pacific NMHS increasingly have robust, fit-for-purpose and well-maintained observation infrastructure*

3.1.1 Implement observation network plans, asset management, standardised infrastructure, data management and maintenance practices

Standardized observation networks, paired with integrated asset management and maintenance systems, will enhance the functionality, homogeneity, sustainability, and data integrity of hydrometeorological infrastructure across the Pacific. This enables better planning, reduces downtime, and ensures timely maintenance through common platforms and coordinated procedures.

Implementation Tasks:

- Develop and continually maintain national and regional observation network asset plans and financial lifecycle cost model, aligned with best practice and industry standards (e.g. RBSN, GBON, RBCN, ISO5500). This would include documenting all existing infrastructure assets (e.g. stations, sensors, IT systems) across each PICT.
- Uplift asset management capability within the pacific, including establishment of a regional asset management and data management policies.
- Create and maintain regional asset management information systems to be used by all NMHSs, including an asset register, metadata, maintenance scheduling, service and calibration records (in field and RIC) and dashboards for reporting. Ensure consistency with CLiDE and other data systems.
- Implement near real-time asset condition and data monitoring systems with automated outage/incident alerts
- Standardise SOPs for installation, inspection and maintenance.
- Standardise data flow pathways, architecture and observing data storage systems – links with **Activity 4.1.1 ICT architecture of IFP**
- Standardise infrastructure requirements and specifications for procurement, to reduce configurations and increase compatibility / inter-operability. Explore establishing regional multi-year supply contracts with vendors for equipment, spares and maintenance & training services.
- Provide training on asset tools, SOPs, standards — **execution under KRA 2**.

This activity has been expanded in line with the approved Roadmap for Sustainable Financing and Asset Management.

3.1.2 Provide asset management and maintenance staff to expand capacity

Having dedicated and trained staff for asset management and maintenance at national and regional levels will improve observation infrastructure reliability, reduce equipment downtime, and ensure continuous data availability for forecasting purposes.

Implementation Tasks:

- Analyse workforce gap across NMHSs and regional institutions (SPREP, SPC etc) to determine staffing needs, with particular focus on building asset management, technician and logistics capability.
- Recruit into roles in those organisations
- Establish professional development and career pathways, including accredited training programs, communities of practice and twinning — **training execution under KRA 2.**
- Ensure diversity and inclusion in hiring, promoting GEDSI representation in technical roles.

This activity has been expanded in line with the approved Roadmap for Sustainable Financing and Asset Management.

3.1.3 Revitalise and expand automatic and manual weather stations

Revitalized and expanded weather station networks will close observation gaps, especially in remote islands and high-risk zones. High-frequency and real-time data collection will improve forecast accuracy and disaster preparedness.

Implementation Tasks:

- Audit existing AWS and manual stations to determine functionality, location suitability, and data gaps.
- Develop a prioritized list of new station locations, considering coverage, hazard exposure, and national priorities.
- Procure and install robust, cyclone-resistant AWS and infrastructure.
- Standardize metadata recording and station classification (e.g. synoptic, climate).
- Establish national and regional data transmission pathways using GTS or WIS.
- Provide field training for observers and technicians on installation and maintenance — **execution under KRA 2.**

3.1.4 Revitalise and expand river gauges and rain gauges

Expanded river and rainfall monitoring networks will support early warning for flash floods and improve long-term hydrological modeling. Enhanced data density will also improve seasonal outlooks and water resource planning.

Implementation Tasks:

- Review river catchments and rainfall patterns to identify high-priority monitoring sites.
- Procure telemetry-enabled river and rain gauge equipment.
- Install new gauges in coordination with water authorities and local communities.
- Integrate data into hydrological models used in KRA 4.
- Train field staff on installation, maintenance calibration, and troubleshooting — **execution under KRA 2.**

3.1.5 Revitalise and establish weather watch radars

Weather radar systems will provide near real-time data on rainfall, wind, and storm activity, enabling short-term severe weather warnings and better cyclone tracking. This significantly enhances resilience in radar coverage gaps.

Implementation Tasks:

- Conduct a regional radar coverage assessment to identify optimal sites - **as part of Activity 3.1.1 network asset plan/strategy**
- Procure, install, and integrate new radar systems in 5 countries — primarily C-band units, depending on country needs.
- Replace/upgrade existing radars which are at end of life.
- Build supporting infrastructure, including power systems, towers, and secure radar shelters. Additional rain gauges for verification and modelling with radar products.
- Develop data integration systems with NMHS forecast centres and IFP.
- Train staff on data management and maintenance — **execution under KRA2.**

(Current decadal investment plan scope and costs exclude UNEP CISPac 5 radars)

3.1.6 Revitalise and expand wave buoys

Wave buoys will improve marine safety and forecasting accuracy by providing real-time data on wave height, direction, and period. These are especially crucial for small island nations with heavy reliance on maritime transport and fisheries.

Implementation Tasks:

- Identify priority maritime routes and open sea areas for buoy deployment - **as part of 3.1.1 network asset plan**
- Procure and deploy satellite-enabled directional wave buoys and anchoring systems.
- Set up SOPs for operations, maintenance, and incident management.
- Link data streams to marine and coastal inundation forecasting models **under KRA 4.**
- Train ocean monitoring staff on deployment, retrieval, maintenance and diagnostics — **execution under KRA 2.**

3.1.7 Revitalise and expand tide gauges

Tide gauges are critical for long-term sea level monitoring and coastal hazard warning. Additional gauges will support tsunami alerts, marine safety, coastal inundation forecasts, and climate resilience planning.

Implementation Tasks:

- Conduct assessments of existing tide gauge stations, data quality and target additional stations (**execution under 3.1.1 Network Asset Plan**) in collaboration with SPC and COSPPac.
- Upgrade sensors, telemetry, and backup power at existing sites.
- Install additional gauges in underserved high-risk areas.
- Train technical staff in tide gauge maintenance, data QA/QC, and international reporting — **execution under KRA 2.**

(Current decadal investment plan scope and costs exclude COSPPac installed and maintained 13 tide gauges.)

3.1.8 Revitalise and expand Meteorological balloon launching systems

Revitalized upper-air balloon systems (releasing regular radiosondes) will significantly improve model accuracy and early warning capabilities by feeding critical atmospheric profile data into global forecasting systems.

Implementation Tasks:

- Identify priority launch sites for daily and special event observations - **execution under 3.1.1 Network Asset Plan**
- Upgrade or replace hydrogen generation equipment
- Procure and establish automatic or semi-automatic balloon release systems for 7 countries
- Integrate radiosonde data into GTS, pacific data flow pathways and data systems.
- Train staff in safe launch procedures, maintenance and data validation — **execution under KRA 5.**

3.1.9 Data capture from aircraft observation using the aircraft meteorological data relay system

Integrating AMDAR (Aircraft Meteorological Data Relay) observations into forecasting systems will improve upper-air data availability, especially over oceanic regions, leading to more accurate model initializations.

Implementation Tasks:

- Coordinate with regional airlines and aviation authorities to activate AMDAR participation.
- Install onboard software/hardware systems in commercial aircraft operating regional routes.
- Establish secure data transmission protocols to relay AMDAR data to WMO and NMHS centres.
- Integrate AMDAR profiles into local NWP models and global systems.
- Provide basic training to airline maintenance and NMHS personnel involved in AMDAR system operation — **execution under KRA 2.**

Output 3.2: WMO-designated Pacific Regional Instrument Centre established and sustainably managed

Anticipated Intermediary Outcomes:

IO3.2 Pacific NMHS increasingly have robust, fit-for-purpose and well maintained observation infrastructure

3.2.1 Establish and operate a Regional Instrument Centre (RIC)

A Regional Instrument Centre (RIC) will ensure calibration and testing hydrometeorological instruments to standardize measurement quality and enhance data reliability of the observation network. The centre in conjunction with RTC and other regional institutes, could further facilitate equipment repair, regional spares provision/warehousing, advanced technician maintenance capabilities and asset management information system to support the PICTs.

Implementation Tasks:

- Identify a host country and institution (e.g. Fiji) and develop appropriate business operating model, revenue model, governance arrangement, infrastructure, technical and administrative staff capacity.
- Procure and install ISO-compliant calibration laboratories and equipment, targeting the parameters of pressure, temperature, humidity, wind, and rain.
- Develop SOPs and quality management systems aligned with WMO regulations and ISO/IEC 17025 certification standards.
- Provide technical training, peer support and/or twinning for RIC management and technical— **execution under KRA 2.**
- Establish service agreements between the RIC and NMHSs etc
- Review and establish a pacific operating model to effectively facilitate equipment repair, regional spares provision/warehousing, advanced technician maintenance/ troubleshooting and asset management information system to support the PICTs.

KRA 4 Forecast and warning production *(previously KRA 2)*

Outcomes:

O1: All Pacific end users assured access to relevant, timely, reliable, accessible and actionable forecasts and warnings

Outputs 4.1 An integrated Pacific forecasting platform established and operating sustainably to global standards

Anticipated Intermediary Outcomes:
IO4.1 Quality forecasting data increasingly collected, integrated, analysed, monitored and maintained in the Pacific and integrated into the global meteorological system
IO4.2 Pacific forecasting and warnings increasing in accuracy

4.1.1 Develop an Integrated Forecasting Platform and strengthen RSMCs

This platform will standardise and automate forecast generation and dissemination, integrating and using global and local data, ensure all NMHSs have access to consistent, quality forecasts, and facilitate timely dissemination through WIS and CAP protocols.

Implementation Tasks:

- Establish requirements and review current forecasting systems used to identify interoperability gaps.
- Design an integrated forecast platform and ICT architecture leveraging available technologies used in partner organisations, NWP data, ensembles, satellite products and local observations. Consider AI technology and machine learning weather models.
- Consider national level cybersecurity and accessibility requirements.
- Improve National and Regional Specialized Meteorological Centres (RSMCs) and NMHSs for the IFP with new systems and hardware (e.g. forecaster work stations, data ingestion and storage, servers, communication links). Consider infrastructure leasing options and cloud-based services for improved supportability and sustainability.
- Establish connections to WMO Information System (WIS) and integrate CAP protocols.
- Develop SOPs for using and maintaining the IFP.
- Train NMHS staff on system usage and maintenance — **execution under KRA 5**.

Outputs 4.2 Pacific forecasting capacity expanded and maintained

Anticipated Intermediary Outcomes:
IO4.1 Quality forecasting data increasingly collected, integrated, analysed, monitored and maintained in the Pacific and integrated into the global meteorological system
IO4.2 Pacific forecasting and warnings increasing in accuracy

4.2.1 Strengthen aviation forecasting

Enhanced aviation forecasting will meet ICAO standards and regional air navigation plans, improve passenger and flight safety, and support airspace management across the Pacific through centralized services and improved regional coordination.

Implementation Tasks:

- Strengthen aviation forecasting in aerodrome meteorological offices and meteorological watch offices, as designated in relevant International Civil Aviation Organisation regional air navigation plans.
- Review existing aviation services for compliance with ICAO and WMO standards.
- Establish or enhance regional aviation hubs with data links and forecasting capabilities.
- Set up data-sharing protocols with Civil Aviation Authorities.
- Train and capacity-building for aviation meteorologists and observers — **execution under KRA 2.**
- Formalize bilateral agreements for aviation forecast delivery in smaller nations and establish cost recovery – links with **Activity 1.2.1**

4.2.2 Strengthen public forecasting

Upgraded public forecasting will improve community preparedness by delivering clear, localized, and actionable forecasts that can be understood and trusted by the public.

Implementation Tasks:

- Automate generation of daily public forecasts for all countries.
- Customize forecast formats (text, graphics, icons) for different audiences.
- Improve severe weather forecasting capability and accuracy including Tropical cyclone forecasting tools
- Embed impact-based forecasting principles to inform actions, not just conditions - **execution under KRA 5.**
- Partner with broadcasters and local media for consistent dissemination – **execution under KRA 5.**
- Train NMHS staff in public communication and user engagement - **execution under KRA 2.**

4.2.3 Strengthen marine forecasting

Improved marine forecasting will ensure the safety of fisheries, ports, shipping, and coastal tourism by providing localized forecasts for waves, currents, tides, and sea states.

Implementation Tasks:

- Assess user needs (e.g., port authorities, fishermen) and develop tailored forecast products.
- Enhance ocean modelling capabilities and observation networks, review synergies with Pacific Ocean Portal maintained by SPC
- Establish SOPs for marine hazard alerts.
- Integrate forecasts into regional marine portals.
- Provide technical training on marine forecast interpretation and modelling — **execution under KRA 2.**

4.2.4 Strengthen coastal inundation forecasting

Enhanced ability to anticipate and issue warnings for storm surges, king tides, and coastal flooding will help mitigate disaster impacts in low-lying Pacific Islands.

Implementation Tasks:

- Implement coastal inundation modelling and forecasting in 5 countries, in collaboration with RSMCs, SPC, WMO CIFI
- Use of bathymetry and topography (e.g. Lidar surveys) mapping and GIS to identify risk zones and observation monitoring (e.g. buoys, tide gauges, river gauges)
- Set up community-based impact thresholds and dissemination protocols.
- Training and build capacity in hazard modelling, GIS, and forecast interpretation — **execution under KRA 2.**

Note: Some of these tasks may move to KRA6 in future if more aligned with those outputs and outcomes.

4.2.5 Strengthen hydrological services and river flood forecasting

Strengthened riverine flood forecasting will enable better early warnings and reduce the impact of flash floods on lives, infrastructure, and livelihoods in vulnerable catchments.

Implementation Tasks:

- Expand and upgrade hydrological monitoring stations and data management (rainfall, streamflow, discharge).
- Implement hydrological models calibrated to local basins.
- Integrate river flood forecasts into national warning systems.
- Coordinate with water authorities and NDMOs on response plans.
- Train staff in hydrological modelling and flood forecasting — **execution under KRA 2.**

4.2.6 Provide additional ICT and other technical staff to expand capacity

Enhanced ICT staffing and technical staff ensures operational resilience and supports the implementation and management of the pacific integrated forecasting platform, data systems, and communication infrastructure critical to effective service delivery.

Implementation Tasks:

- Assess current ICT and other technical capacity and develop additional staffing plans for each NMHS and regional institutions (SPREP, SPC etc)
- Recruit IT personnel for enabling the IFP, server maintenance, software management, cybersecurity, and technical troubleshooting.
- As a minimum additional ICT staff in each of the 14 NMHS and 2 additional ICT staff in Fiji
- Establish professional development and career pathways, including accredited training programs, communities of practice and twinning — **training execution under KRA 2.**
- Ensure diversity and inclusion in hiring, promoting GEDSI representation in technical roles.

KRA 5 Communication and delivery of forecasts and warnings to end users *(previously KRA 3)*

Outcomes:
O5 - Pacific communities, governments, industries and travellers increasingly trust, understand forecasts and warnings
O6 – More informed and targeted disaster preparedness and responses inclusive of all genders, abilities, cultures and socio-economic groups

Outputs 5.1 Pacific capacity and collaborative approaches to deliver locally-relevant, impact-based, inclusive and accessible forecasts and warnings for end users strengthened and sustained.

Anticipated Intermediary Outcomes:
IO5.1 PRP members and communities collaborating effectively to communicate impact-based forecasts and warnings (inclusive of traditional knowledge) to all Pacific end users
IO5.2 Skills, knowledge and confidence of community members increased

5.1.1 Planning for delivery of impact-based messages and warnings to end-users, considering persons with disabilities and vulnerable groups.

A structured, inclusive planning approach will ensure NMHSs and NDMOs can deliver warnings that are actionable, trusted, and tailored to the risks, needs, and communication preferences of diverse user groups — especially women, persons with disabilities, and remote communities.

Implementation Tasks:

- Develop an engagement strategy to address the needs of specific vulnerable groups (e.g. persons with disabilities, children and remote communities)
- Conduct national and regional end-user workshops to identify what type of information will trigger protective action, targeting sectors like agriculture, tourism, and fisheries, as well as women's groups, OPDs, and village councils.
- Conduct risk assessments and mapping with diverse groups to understand their unique vulnerabilities, capacities and exposures to hazards.
- Document pathways for message transmission and community uptake, particularly in underserved areas.
- Develop national communication plans and SOPs that reflect user mapping, gender and disability considerations, and localised dissemination approaches.
- Facilitate NMHS-NDMO coordination workshops to strengthen governance, clarify roles, and build trust between forecast producers and response agencies.
- Embed inclusive planning frameworks in national Multi-Hazard Early Warning Systems.
- Train NMHS and NDMO staff in participatory planning and inclusive communication systems — **training under KRA 5**.

5.1.2 Prepare impact-based, location specific warnings, based on assessments and modelling, and incorporating traditional knowledge

Tailored, location-specific warnings improve relevance and lead to better protective behaviour. By integrating traditional knowledge with scientific models, and participatory hazard mapping, messages become more trusted and meaningful to communities and vulnerable sectors/industries end-users.

Implementation Tasks:

- Conduct hazard and vulnerability assessments in consultation with local knowledge holders, traditional leaders, and at-risk groups, vulnerable industries/sectors
- Collaborate with elders and cultural experts to incorporate traditional indicators and risk understanding into warnings.
- Document local traditional indicators (e.g., frigate bird patterns, river levels) and link them to probabilistic forecasts and thresholds.
- Co-produce impact scenarios (e.g. flood maps) with communities using GIS and climate data.
- Develop location-specific warnings based on scientific and cultural indicators — "what the weather will do", not just "what it is".
- Establish standard messaging formats for different event types (e.g., storm, cyclone, coastal inundation) and ensure templates are translated into culturally appropriate formats, including audio, graphics, and local dialects.
- Coordinate **with KRA 4** to ensure forecasting models align with localized risk thresholds.
- Train NMHSs and partners on impact modelling, message design, and traditional knowledge integration — **training under KRA 2**.

5.1.3 Deliver and continuously review impact-based messaging including translation into local languages

Weather and hazard information will be accessible and actionable to all Pacific peoples, regardless of language, literacy, digital access or disability. Continuous review and feedback mechanisms will ensure messages remain relevant and effective over time.

Implementation Tasks:

- Develop standardised but flexible message templates that reflect local expressions, cultural references, and anticipated impacts.
- Translate messages into vernacular languages, and produce material with simplified text or visual formats (e.g. icons, maps) or low-literacy groups.
- Distribute messages through multiple channels — radio, SMS, social media, community loudspeakers – **under 5.1.5.**
- Implement two-way feedback systems and knowledge brokering (e.g. WhatsApp, call-ins, local consultations) to test and revise messages.
- Establish a regular review and feedback process with expert group of GEDSI advisors, community representatives and NDMOs through case studies reviews, post-event evaluations, user surveys, and simulation exercises.
- Train forecasters and warning communicators in inclusive language use and user-centered design — **execution under KRA 5**.

5.1.4 Inclusive Community Education and Information-Exchange collectives

Local partnerships and information exchange will build sustainable, community-led understanding of forecasts and warnings. Awareness activities grounded in local knowledge, children's education, and women's leadership will enhance trust and empower the most marginalised.

Implementation Tasks:

- Launch a "Met 101" educational programme for community representatives and leaders, including those from women's group, Organisations of Persons with Disabilities (OPDs), faith-based organisations (FBOs) and local council members. This program will build foundational understanding of multi-hazard early warnings, seasonal outlooks, and hydrometeorological services.
- Co-develop and distribute Pacific-contextualised COPE children's books, translating them into local languages and embedding them in formal and informal education programs. These books will promote intergenerational knowledge-sharing.
- Strengthen and scale existing community-based initiatives like the Fiji's Women's Weather Watch (WWW) and Vanuatu's Women Weta Weta, recognising their unique role in grassroots information collection, dissemination, and real-time feedback.
- Real-time community insights by piloting community-based information-exchange collectives and knowledge brokering. Thismay include mobile phone apps, social media, and traditional methods (e.g. church loudspeakers, town criers), to disseminate warnings and receive real-time observations (including TK observations) from communities and close the communication loop.
- Integration of wisdom and traditional knowledge, recognise the integration of knowledge from diverse social groups within communities such as women's traditional knowledge, specific practices of older persons, deepens social inclusion through understanding and recognising specific needs and contributions.

This activity has been expanded to in line with the GEDSI Transformative Action, to decentralise knowledge, build local agency and participation of those most at risk.

5.1.5 Develop innovative approaches for dissemination of forecasts and warnings to end-users

A diversified and inclusive set of communication tools — from high-tech to low-tech — will ensure that warnings reach every household, including those in remote, offline, or underserved areas (e.g. cell broadcasting, mobile apps, social media).

Implementation Tasks:

- Review technology and access to map communication gaps and preferences across population segments and locations.
- Develop or adapt warning apps, SMS alerts, and automated voice messages with multi-language support and disability accessibility (e.g. screen-reader compatibility).
- Partner with telecoms for free or subsidised cell broadcasting for critical warnings.
- Design low-bandwidth solutions (e.g. text-based alerts) for low-income and rural areas.
- Promote traditional methods (e.g. church bells, community loudspeakers) in conjunction with digital tools (social media, mobile apps)
- Train staff on platform maintenance and inclusive design of tools - **training under KRA 5.**
- Ensure all tools align with impact-based warning standards and protocols established under 5.1.2 and 5.1.3.

5.1.6 Install communication internet access equipment and operational costs

Reliable, remote connectivity is critical for timely data access, forecast and warning dissemination in outer islands and underserved regions. Internet will enable real-time, two-way communication and exchange with communities and end-users.

Implementation Tasks:

- Identify and prioritise NMHSs, NDMOs and community hubs with limited internet connectivity for last-mile reach, for multi-hazard early warnings and consideration of intersectional vulnerabilities (health, GBV, PWD information etc)
- Procure and install communication links and systems (e.g. satellite, starlink), with appropriate site selection, backup power solutions and sustainability plan for repair and support some operating costs.
- Integrate internet-linked systems into dissemination pathways (e.g. mobile alerts, CAP-based messaging).
- Train national and community-level users on internet use for forecast retrieval and warning dissemination — **training under KRA 5**.

5.1.7 Provide additional staff for warning communication and engagement to expand capacity

A well trained and sufficiently staffed NMHSs and NDMOs for delivery of impact based warnings and proactive communication and engagement with end-users, enables effective service delivery and responsiveness to end-user needs.

Implementation Tasks:

- Assess forecasting and communications/engagement capacity and develop additional staffing plans for NMHSs and NDMOs, and regional institutes if appropriate (SPREP, SPC etc)
- Recruit into roles in those organisations
- Establish professional development and career pathways, including accredited training programs, communities of practice and twinning — **training execution under KRA 2**.
- Ensure diversity and inclusion in hiring, promoting GEDSI representation in technical roles.

KRA 6 Risk Information and Preparedness *(new KRA to align with EW4All)*

Outcome:
O6 – More informed and targeted disaster preparedness and responses inclusive of all genders, abilities, cultures and socio-economic groups

Output 6.: Standardised, interoperable and inclusive multi-hazard data produced, stored and shared with resilience partners
Anticipated Intermediary Outcomes: *IO6.1 Multi-hazard and multi-agency approach increasingly reflected in risk products, preparedness and response plans/procedures* *IO6.2 Multi-hazard early warnings include traditional knowledge and are accessible to diverse and vulnerable communities*

6.1.1 TBD

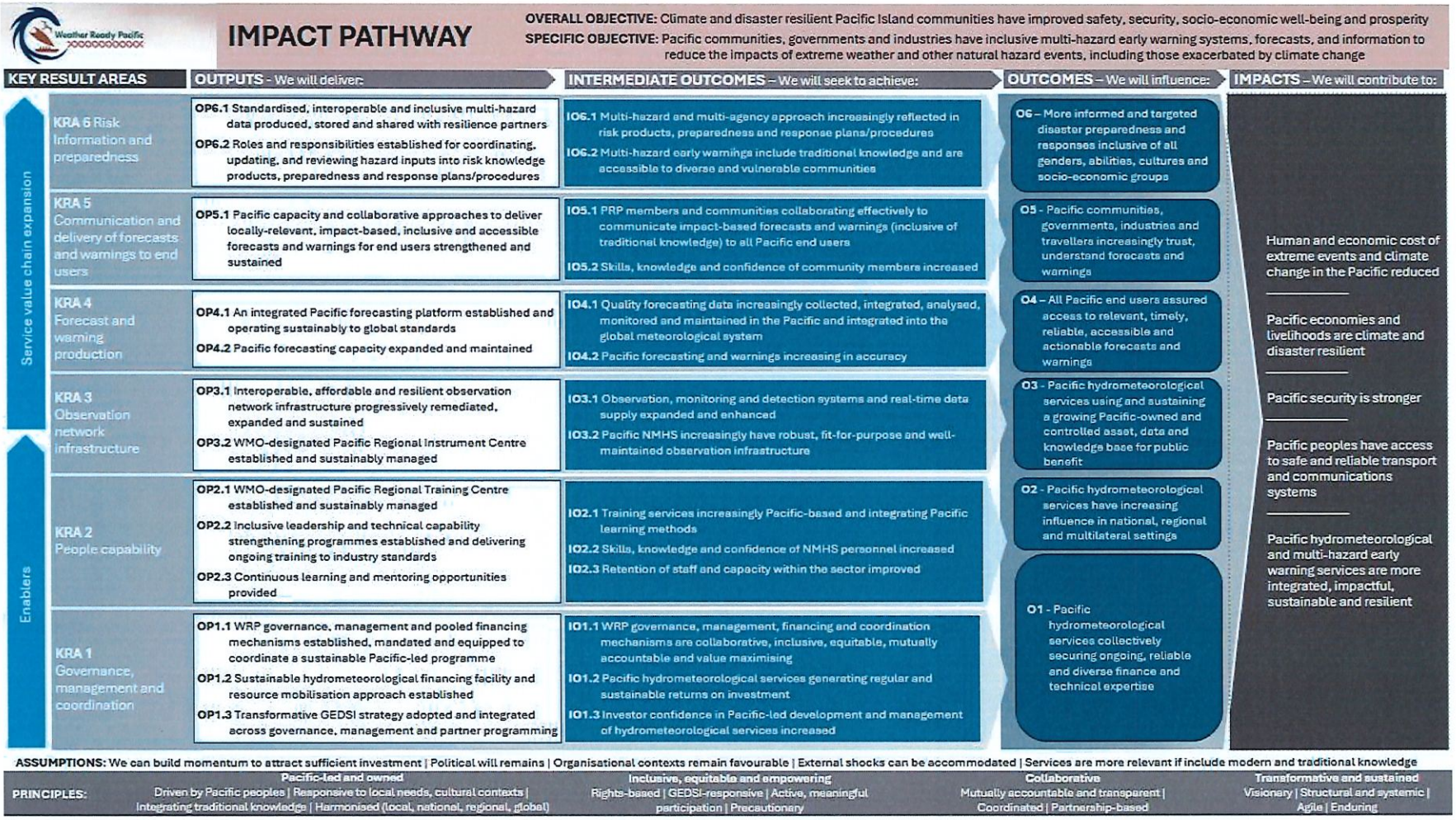
TBD from updated investment plan

Outputs 6.2 Roles and responsibilities established for coordinating, updating, and reviewing hazard inputs into risk knowledge products, preparedness and response plans and procedures
Anticipated Intermediary Outcomes: *IO6.1 Multi-hazard and multi-agency approach increasingly reflected in risk products, preparedness and response plans/procedures*

6.2.1 TBD

TBD from updated investment plan

Appendix 1 Logic Framework Impact Pathway for Weather Ready Pacific Programme



OBJECTIVES What we are striving for in the future – the direction we are heading

How we will get there – our impact pathway (results chain)

KEY RESULT AREAS

Thematic areas under which we provide inputs to implement activities as part of delivering outputs and achieving intermediate outcomes

INPUTS
The financial, human, material and intellectual resources we seek to provide

ACTIVITIES
How we mobilise inputs to complete actions

OUTPUTS
What we will deliver – the physical products, goods and services delivered by the implementing team undertaking a series of actions

INTERMEDIATE OUTCOMES
What we will achieve in the short and medium term – changes in access, skill, awareness, knowledge, attitudes, approaches, behaviours

OUTCOMES
What we seek to influence – the change anticipated by the end of the programme

IMPACTS
What we will contribute to in the long term

Sphere of control

Sphere of influence

Sphere of aspirational influence / concern

ASSUMPTIONS Causal pathways, events and conditions that need to be realised for the change to occur

PRINCIPLES That which guides our behaviour – how we implement activities, achieve the outputs, monitor results and adapt

Appendix 2 Staff Cost Projections

KRA	Activity No.	Activity	Project Title	WRP Funding Source	Executing Agency	% Progress	Year 2024_	2025_	2026_	2027_	2028_	2029_	Total Funding Allocated USD
1	1.1.4	PMU Staff (Management and Delivery Support roles)	Staff: Programme Manager	DFAT Inception	WRP	100%	72,766	198,632	198,632	198,632	198,632	198,632	**1,065,926**
			Staff: Finance Accountant	DFAT Inception	WRP	100%		74,923	149,845	149,845	149,845	149,845	**674,303**
			Staff: Finance & Administration Officer	DFAT Inception	WRP	100%	9,270	37,180	37,180	37,180	37,180	37,180	**195,170**
			Staff: ESS/GEDSI Officer	DFAT Inception	WRP	10%		33,744	134,977	134,977	134,977	134,977	**573,652**
			Staff: Procurement and Contracts Officer	DFAT	WRP	50%		33,744	134,977	134,977	134,977	134,977	**573,652**
			Staff: Communications and Knowledge Management Officer	DFAT	WRP	50%		33,744	134,977	134,977	134,977	134,977	**573,652**
			Staff: Resource Mobilisation Officer	DFAT	WRP	0%							**0**
			Staff: WRP Secretariat and PMC Technical Support Officer	DFAT	WRP	0%			126,592	126,592	126,592	126,592	**506,368**
			Staff: ICT Officer	DFAT	WRP	0%							**0**
			Staff: Monitoring, Evaluation, Research, Learning and Adaptation Officer (MERLA)	DFAT	WRP	10%		22,496	134,977	134,977	134,977	134,977	**562,404**
			Staff: Finance Investment Advisor	DFAT	WRP	0%							**0**
2	2.2.6	Provide additional staff for training and capacity development	Staff: Support to WRP PMU Human Resource	UKWISER	WRP	50%		86,241	43,120				**129,361**
			Staff: Technical Adviser Capability Training	DFAT	WRP	50%			122,447	163,262	163,262	163,262	**612,233**
3	3.1.2	Provide asset management and maintenance staff to expand capacity (e.g. SPREP, SPC, NMHS)	Staff: Technical Adviser Infrastructure & ICT	DFAT Inception	WRP	80%		40,816	163,262	163,262	163,262	163,262	**693,864**
			Staff: SPC resource to coordinate oceans infrastructure and asset management	DFAT	SPC	0%							**0**
			Staff: Asset Manager	DFAT	WRP	5%				126,592	126,592	126,592	**379,776**
5	5.1.7	Provide additional staff for warning communication and engagement to expand capacity	Staff: Technical Adviser Forecasting	DFAT	WRP	0%						163,262	**163,262**
Sub Total							**82,036**	**561,520**	**1,380,986**	**1,505,273**	**1,505,273**	**1,668,535**	**6,703,623**

Annex 1 Risk Register

Annex 2 Project Work Plan 2024 - 2029

Annex 3 Adaptation and Change and Adaptation Register