

**United Nations Development Programme (UNDP)**

**Regions: Asia-Pacific (RBAP)**

**Project Document**

<b>Project Title:</b>	Disaster Resilience for Pacific SIDS (RESPAC)												
<b>Expected RBAP Regional Program Document Outcome 3<sup>1</sup>:</b>	Countries are able to reduce the likelihood of conflict, and lower the risks of natural disasters, including from climate change												
<b>Expected Outputs as stated in the UNDP Pacific Regional Project Document</b>	Output 3.1: Effective institutional, legislative and policy frameworks in place to enhance the implementation of disaster and climate risk management measures at national and sub-national levels  Output 3.2. Preparedness systems in place to effectively address the consequences of and response to natural hazards (geo-physical and climate related) and man-made crisis at all levels of government and community.												
<b>Executing Entity:</b>	UNDP												
<b>Implementing Agencies:</b>	UNDP Pacific Office												
<p align="center"><b>Brief Description</b></p> <p>The project <i>Disaster Resilience for Pacific SIDS (RESPAC)</i> aims to improve Pacific SIDS resilience to climate-related hazards. The project will respond to outcome 3 of the RBAP Regional Program Document: <i>Countries are able to reduce the likelihood of conflict, and lower the risks of natural disasters, including from climate change.</i></p> <p>In line with the overall outcome, the overall project goal is to effectively address the consequences of, and responses to, climate related hazards. The outcome will be achieved through 3 expected outputs:</p> <ol style="list-style-type: none"> <li>1. Strengthened early warning systems and climate monitoring capacity in selected PICS;</li> <li>2. Preparedness and planning mechanisms and tools to manage disaster recovery processes strengthened at regional, national and local level;</li> <li>3. Increased use of financial instruments to manage and share disaster related risk and fund post disaster recovery efforts.</li> </ol> <p>The project will be implemented by the UNDP Pacific Office under the UNDP Direct Implementation Modality (DIM) and will be part of the Resilient and Sustainable Development team.</p> <p>The duration of this project is three years (June 2016 – December 2019). The proposed budget is USD\$7,500,000</p>													
Regional Programme Period: 2014-2017  Outcome 5 of UNDP Strategic Plan for 2014-2017: <i>Countries are able to reduce the likelihood of conflict, and lower the risk of natural disasters, including from climate change.</i>	<table border="0"> <tr> <td>Total resources required:</td> <td align="right">\$20,617,754</td> </tr> <tr> <td>Total allocated resources:</td> <td align="right">\$20,617,754</td> </tr> <tr> <td>• Russian Federation :</td> <td align="right">\$7,500,000</td> </tr> <tr> <td>• Co-financing:</td> <td></td> </tr> <tr> <td>    ○ UNDP/PRRP parallel</td> <td align="right">\$13,114,754</td> </tr> <tr> <td>    ○ Government parallel</td> <td align="right">tbd</td> </tr> </table>	Total resources required:	\$20,617,754	Total allocated resources:	\$20,617,754	• Russian Federation :	\$7,500,000	• Co-financing:		○ UNDP/PRRP parallel	\$13,114,754	○ Government parallel	tbd
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<sup>1</sup> Note that UNDP RBAP Regional Outcome 3 corresponds directly with UNDP Strategic Plan 2014 – 2017 Outcome 5

Atlas Award ID: Start date: June 2016 End Date: December 2019 PAC Meeting Date: March 14, 2016 (e-PAC) Management Arrangements: Direct Implementation				
	<b>Name</b>	<b>Title</b>	<b>Date</b>	<b>Signature</b>

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## ACRONYMS

CCA	Climate Change Adaptation
CCDRM	Climate Change and Disaster Risk Management
DRR	Disaster Risk Reduction
FSM	Federated States of Micronesia
GFCS	Global Framework for Climate Services
NDMOs	National Disaster Management Offices
NMSs	National Meteorological Services
PICs	Pacific Island Countries
PICTs	Pacific Island Countries and Territories
PIMS	Pacific Islands Meteorology Strategy
PMC	Pacific Meteorological Council
SIDS	Small Island Developing States
SLR	Sea Level Rise
SPC	Secretariat of the Pacific Community
SPREP	Secretariat of the Pacific Regional Environmental Programme
SRDP	Strategy for Climate and Disaster Resilient Development
SSC	South-South Cooperation
SME	Small-Medium Enterprises
UNDP	United Nations Development Programme
USP	University of the South Pacific
WMO	World Meteorology Organization

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## I. SITUATION ANALYSIS

Global climate change is one of the most serious challenges to the development aspirations of Small Island Developing States (SIDS). Located in a region of the world with intense, frequent and increasingly impactful environmental disasters, SIDS's vulnerability to disasters is heightened due to their isolated geographic situation, insularity, ecological fragility and the social and economic disadvantages related to their small size. Small populations and high level of outward migration compound this vulnerability; economic stressors due to poverty, limited resources, markets unable to generate economies of scale, reliance on international trade, and costly public administration infrastructure creates indebtedness and further susceptibility to global developments<sup>2</sup>.

Pacific SIDS are among those most threatened by natural hazards such as cyclones, earthquakes, volcanoes, droughts and floods. Most of these hazards are climate-related; as the SIDS contend with the increasingly significant impact of climate change on their territories, the risk of disaster loss and damage increases. With relatively insignificant GHG emission, the Pacific SIDS bear a disproportionate burden of the unsustainable production and consumption patterns beyond their borders. According to the *Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Chapter 29), current and future climate-related drivers of risk for SIDS in the 21st century include sea level rise (SLR), tropical and extra-tropical cyclones, increasing air and sea surface temperatures, and changing rainfall patterns<sup>3</sup>. Increasingly, these climatic disruptions will impact the regions' geophysical, biological and socio-economic systems, producing coastal erosion, increased flood risk, salinization of water resources and in some areas permanent loss of land. These impacts affect food production, water resources, health, coastal development, and natural asset/resource-based livelihoods, including agriculture, and fisheries. Impacts are cross-cutting, cumulative, depleting national budgets, and limiting development options.

### The Pacific Region

The Pacific islands region includes 22 countries and territories, with thousands of islands scattered over a large expanse of ocean<sup>4</sup>. It is a culturally, geographically and economically diverse region, with a population of approximately 10.5 million<sup>5</sup> people divided into three major ethnic/cultural groupings: Melanesia, Polynesia and Micronesia. The region has a combined island land mass of 550,000 km<sup>6</sup> surrounded by a sea area of more than 14,000,000 km<sup>7</sup>. The countries are a mix of continental and volcanic islands, and low and raised coral atolls. 90% of the land mass and 85% of the region's population is found in Melanesian countries (mostly Papua New Guinea); less than three million people reside in the remaining Pacific island countries and territories.

UNDP's efforts in the region include support to 14 countries (Cook Islands, Federated States of Micronesia - FSM, Fiji, Kiribati, Republic of Marshall Islands - RMI, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu) and 1 territory (Tokelau), with a total population estimated in 9.937 million in 2014<sup>8</sup>. There is considerable variation across these 14 Pacific Island Countries (PICs) in terms of per capita income levels. Most of countries have income levels of less than US\$5000/capita; four countries

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<sup>2</sup> [http://www.pacificdisaster.net/pdnadmin/data/original/UNDP\\_2012\\_Checklistgender\\_DRM\\_SIDS.pdf](http://www.pacificdisaster.net/pdnadmin/data/original/UNDP_2012_Checklistgender_DRM_SIDS.pdf)

<sup>3</sup> L.A., R.F. McLean, J. Agard, L.P. Briguglio, V. Duvat-Magnan, N. Pelesikoti, E. Tompkins, and A. Webb, 2014: Small islands. In: *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Barros, V.R., C.B. Field, D.J. Dokken, M.D. Mastrandrea, K.J. Mach, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 1613-1654, available at: [http://ipcc-wg2.gov/AR5/images/uploads/WGIAR5-Chap29\\_FINAL.pdf](http://ipcc-wg2.gov/AR5/images/uploads/WGIAR5-Chap29_FINAL.pdf)

<sup>4</sup> 22 PICs are members of the Secretariat of the Pacific Community (SPC): American Samoa, Cook Islands, Federated States of Micronesia, Fiji, French Polynesia, Guam, Kiribati, Marshall Islands, Nauru, New Caledonia, Niue, Northern Mariana Islands, Palau, Papua New Guinea, Pitcairn Islands, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu, and Wallis and Futuna. Other members of the SPC are Australia, France, New Zealand and the United States of America as funding countries. For more information, please see: <http://www.spc.int/en/about-spc/members.html>

<sup>5</sup> According to SPC, *Programme Results report 2013-2014*, total population for the 22 member PICs was estimated in 10,566,560 in mid-2013, <http://www.spc.int/images/publications/en/Corporate/SPC-Programme-Results-Report.pdf> p.7.

<sup>6</sup> <http://www.spc.int/images/publications/en/Corporate/SPC-Programme-Results-Report.pdf> p.7.

<sup>7</sup> <http://www.cid.org.nz/assets/Integratinggender-in-disaster-management-in-SID.pdf>, p.12.

<sup>8</sup> [http://countryoffice.unfpa.org/pacific/drive/web\\_140414\\_UNFPAPopulationandDevelopmentProfiles-PacificSub-RegionExtendedv1LRv2.pdf](http://countryoffice.unfpa.org/pacific/drive/web_140414_UNFPAPopulationandDevelopmentProfiles-PacificSub-RegionExtendedv1LRv2.pdf) p.4

in the region are designated Least Developed Countries (LDCs – Solomon Islands, Vanuatu, Tuvalu and Kiribati). Seven countries in the region are eligible for International Development Association (IDA) credits, which target the world's poorest countries (FSM, RMI, Kiribati, Tonga, Tuvalu, Samoa and Vanuatu). In general, the economies of most Pacific island countries are small, fragile and susceptible to external shocks. The dispersed geographic nature of the region, its cultural/ethnic diversity, and their limited human and financial resources present many challenges in terms of the disaster management.

The region has a highly variable climate, which is heavily influenced by the Pacific El Niño Southern Oscillation (ENSO). The region is exposed to natural hydro-meteorological and geological hazards such as cyclones, earthquakes, tsunamis, volcanoes, droughts and floods. On average the region experiences four major weather related disasters each year.

Since 1950 extreme events have affected 9.2 million people in the region, causing 9,811 fatalities<sup>9</sup>. According to the “Hydro-meteorological Disasters in the Pacific” SPC-SOPAC report there were 615 disaster events in a thirty-year period (1983-2012), of which 75% were hydro-meteorological in nature, the most common being cyclones followed by floods. The total cost of these disasters in the same period is estimated at USD 3.9 billion<sup>10</sup>.

*Tropical Cyclones* represent 42% of all disasters in the Pacific region between 1983 and 2012<sup>11</sup>. More recently Cyclone Evan and Tropical Storm Pam have heavily affected the region. In December 2012 Cyclone Evan hit Samoa and caused damage and significant losses, affecting sectors such as transport, agriculture, the environment, electricity, and tourism, with a total estimated damage US\$203.9 million; there were five fatalities and 4,763 persons displaced<sup>12</sup>. In March 2015, Tropical Cyclone Pam struck Vanuatu as a destructive Category 5 Cyclone, damaging 15,000 buildings, displacing approximately 65,000 people, and impacting at least 80% of the livelihoods in the rural populations<sup>13</sup>. The total estimated damage of Tropical Cyclone Pam is US\$390 million, equivalent to 47% of Gross Domestic Product (GDP) in Vanuatu<sup>14</sup>.

*Floods* are the second most common disaster, representing 16% of disasters in the region<sup>15</sup>. In 2014, heavy rains resulted in flash flooding in Honiara, the capital city of Solomon Islands. The Government declared a state of emergency in Honiara and Guadalcanal Province; 23 people died, 9,000 persons took shelter in evacuation centres, and more than 52,000 people were affected across the country<sup>16</sup>.

*Droughts* correspond to 4% of natural disasters in the region. In 2011, a period of severe drought impacted on the island countries of Tuvalu and Tokelau, resulting in a declaration of emergency<sup>17</sup>. As of early 2015, a severe extended drought and frost has struck Papua New Guinea, affecting more than 1.8 million people across the country, destroying crops and reducing water supplies<sup>18</sup>. The Papua New Guinea government's National Disaster Centre estimates that providing food to affected families will cost \$12 million over the next four months<sup>19</sup>.

*Sea Level Rise (SLR)* is a serious threat to Pacific SIDS, depending on their island geo-physical characteristics. SLR is projected to contribute to greater storm surge impact, and result in sea flooding and erosion of low-lying coastal areas and atoll island states, such as Tuvalu and Kiribati. In Tuvalu for example, the average height of the atolls is less than 2 metres (6.6 ft) above sea level; the highest point of one of the islands is 4.6 metres (15 ft) above sea level<sup>20</sup>. SLR will degrade fresh groundwater supplies and reef ecosystems, a basis for

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<sup>11</sup> <http://www.wmo.int/sids/sites/default/files/Statistical%20Summary%20-%20Hydrometeorological%20Disasters%20in%20the%20Pacific.pdf>

<sup>12</sup> [http://www.gfdr.org/sites/gfdr/files/SAMOA\\_PDNA\\_Cyclone\\_Evan\\_2012.pdf](http://www.gfdr.org/sites/gfdr/files/SAMOA_PDNA_Cyclone_Evan_2012.pdf)

<sup>13</sup> Project notes Russia's contribution to recovery efforts in Vanuatu, specifically in livelihood restoration and debris clean up, and will draw on this experience to inform the Recovery Seed Fund.

<sup>14</sup> Vanuatu, Draft Post-Disaster Needs Assessment Tropical Cyclone Pam, March 2015

<sup>15</sup> <http://www.wmo.int/sids/sites/default/files/Statistical%20Summary%20-%20Hydrometeorological%20Disasters%20in%20the%20Pacific.pdf>

<sup>16</sup> [http://www.wpro.who.int/southpacific/programmes/health\\_sector/emergencies/WHO-HEALTH-Sitrep1-2014.pdf?ua=1](http://www.wpro.who.int/southpacific/programmes/health_sector/emergencies/WHO-HEALTH-Sitrep1-2014.pdf?ua=1)

<sup>17</sup> <http://www.news24.com/SciTech/News/Massive-drought-in-South-Pacific-20111004>

<sup>18</sup> <http://theconversation.com/as-papua-new-guinea-faces-worsening-drought-a-past-disaster-could-save-lives-46390>

<sup>19</sup> <http://www.reuters.com/article/2015/09/07/us-papua-newguinea-climate-idUSKCN0R70JT20150907>

<sup>20</sup> [http://www.un.org/esa/dsd/resources/res\\_pdfs/ga-64/cc-inputs/Tuvalu\\_CCIS.pdf](http://www.un.org/esa/dsd/resources/res_pdfs/ga-64/cc-inputs/Tuvalu_CCIS.pdf)

tourism and subsistence fisheries, impacting the population and way of life and increasing the risk of displacement and outward migration.

*Economic Losses* amplify the impact of a disaster. Of the 20 countries in the world with highest average annual disaster losses scaled by GDP, eight were Pacific Islands Countries: Vanuatu, Niue, Tonga, the Federated States of Micronesia, the Solomon Islands, Fiji, the Marshall Islands and the Cook Islands<sup>21</sup>. The annual impact of disasters on Pacific Island economies is estimated at USD 284 million<sup>22</sup>; the estimated cost of damage and loss suffered by PICs as a result of recent natural disasters ranges from 2.6 percent to 28 percent of national gross domestic product (GDP)<sup>23</sup>. In 2009, in Samoa alone the total economic value of damage and loss caused by the tsunami was assessed at US\$104.4 million, equivalent to about 20% of the country's GDP<sup>24</sup>. Following the 2012 Cyclone Evan, the post-disaster needs assessment estimated that the GDP growth rate would slow down by 0.2 percent in 2012, reach zero or negative in 2013, and may not fully recover by 2014. Average annual losses estimated for Tonga due to natural disasters is 4.4% of GDP respectively<sup>25</sup>. Post Tropical Cyclone Pam will reduce Vanuatu's GDP growth by 5.5 percent, bringing the growth rate down to -0.9%. This would represent a significant contraction of the Vanuatu economy in 2015<sup>26</sup>.

The reality in the SIDS context is that a disaster, while not huge in absolute terms, can be profound and represents a major set-back with long lasting impacts in terms of recovery and resilience. Increasing the capacity of the PICs to effectively manage climate-related risks, reduce potential losses from extreme events, and recover more quickly from disasters is of paramount importance.

*Climate Change:* While the region already faces considerable challenges in terms of managing disaster risks, climate change will accentuate these challenges as the frequency and intensity of extreme weather events are projected to increase over the coming decades. Additionally climate change can be understood as a slow-onset disaster with deep consequence for future well-being of PICs.

Based on current trends, Climate Tracker estimates a 3.9°C temperature increase by 2100. This would decrease to 3.1°C if the current Intended Nationally Determined Contributions are realized.<sup>27</sup> These temperatures will have severe consequences for Pacific Island Countries. The local climate would shift, directly affecting livelihoods, access to water, and food security. A regional warming of +2°C implies a risk that “the rise could substantially undermine future global food security”<sup>28</sup>. Climate change will affect water resources, causing the salinization of fresh water and arable lands, and heavily impact SIDS agriculture.

Many PICs are likely to face high reductions in agricultural production due to climate change. Loss of land and saline intrusion will reduce available land for agricultural production and impede crop growth of yams, taro, sweet potatoes, and bananas - staple island foods- leading to negative consequences for livelihoods and food security. Humid conditions will increase the possibility of pest and plant diseases, inducing crop deterioration. Crop failures and pest epidemics will expose people to unhealthy conditions<sup>29</sup>.

Climate change will impact the tourism sector and consequently PICs economies. The majority of settlements and tourist infrastructures are located in lowlands along the coasts, making them at risk of sea level rise. The possibility for extreme events could keep tourists away. Changes in the availability or quality of freshwater during drought events linked to climate change could also have adverse impacts on tourism operations<sup>30</sup>. From

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<sup>21</sup> <http://www.worldbank.org/content/dam/Worldbank/document/EAP/Pacific%20Islands/climate-change-pacific.pdf>

<sup>22</sup> [https://unfccc.int/files/adaptation/cancun\\_adaptation\\_framework/loss\\_and\\_damage/application/pdf/litea.pdf](https://unfccc.int/files/adaptation/cancun_adaptation_framework/loss_and_damage/application/pdf/litea.pdf)

<sup>23</sup> [https://www.gfdrr.org/sites/default/files/publication/2015.06.25\\_PCRAFI\\_Combined-%5BCompressed%5D-rev-0.9.pdf](https://www.gfdrr.org/sites/default/files/publication/2015.06.25_PCRAFI_Combined-%5BCompressed%5D-rev-0.9.pdf)

<sup>24</sup> <http://theconversation.com/as-papua-new-guinea-faces-worsening-drought-a-past-disaster-could-save-lives-46390>  
<http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/EASTASIAPACIFICEXT/EXTEAPREGTOPRISKMGMT/0,,menuPK:4078483~pagePK:51065911~piPK:64171006~theSitePK:4077908,00.html>

<sup>25</sup> <http://www.worldbank.org/en/news/press-release/2013/06/03/losses-from-disasters-in-east-asia-and-pacific-raise-concerns-for-poverty-reduction>

<sup>26</sup> Vanuatu, Draft PDNA, Cyclone Pam, 2015.

<sup>27</sup> <http://climateanalytics.org/what-we-do/climate-action-tracker> (accessed on March 19, 2016)

<sup>28</sup> <http://www.worldbank.org/content/dam/Worldbank/document/EAP/Pacific%20Islands/climate-change-pacific.pdf> , p.9.

<sup>29</sup> Asian Development Bank, Climate Change in the Pacific, <http://www.adb.org/publications/climate-change-pacific-stepping-responses-face-rising-impacts>

<sup>30</sup> [http://ipcc-wg2.gov/AR5/images/uploads/WGIAR5-Chap29\\_FINAL.pdf](http://ipcc-wg2.gov/AR5/images/uploads/WGIAR5-Chap29_FINAL.pdf)

an economic point of view, Pacific Island tourism risks losing billions of dollars annually if SLR or storm surges threaten infrastructure, ocean bleaching threatens the recreational appeal of coral reefs, or freshwater supplies decrease<sup>31</sup>.

Maintaining water resources and water supply is critical for Pacific countries, particularly for countries with atolls. Freshwater supplies will be more limited on many Pacific Islands, especially low islands, as the quantity and quality of water in aquifers and surface decreases due to drought or sea-level rise. Increased rates of coastal erosion will reduce the size of the freshwater lenses under atolls<sup>32</sup>.

These effects can have both short-term and long-term impact on human health through increased disease transmission and health problems related to deterioration of water and food security. According to the *Fifth Assessment Report of the IPCC* (Chapter 29), the incidence of diseases such as malaria and dengue fever are increasing in Pacific islands, due to climate variability; these diseases, as well as cholera, are projected to increase as the climate changes<sup>33</sup>.

A “business as usual” stance - which focuses on reactive and short-term disaster response - is unlikely to reduce the economic, human and ecosystem losses associated a changing climate<sup>34</sup>. A more pro-active approach which aims to improve climate-science and monitoring, early warning systems, pre-disaster recovery planning and risk transfer is needed. To achieve this the PICs need to develop their capacity to monitor weather and climatic patterns, prepare key sectors for climate-risk integration, manage and coordinate post-disaster recovery efforts and use risk transfer mechanisms. The aim of this project is contribute to PIC efforts to reduce risk to climate-phenomenon in the short and long term and increase resilience at a regional and national level.

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## II. INSTITUTIONAL CONTEXT

This proposal complies with and seeks to support the implementation of the following regional and international agreements including frameworks, strategies, and plans regarding climate and disaster resilient development in SIDS:

Pacific Leaders in 2005 approved the **Pacific Disaster Risk Reduction and Disaster Management Framework for Action (RFA) 2005 – 2015** (Regional DRM Framework) that identified six thematic areas for investment in order to address issues related to the vulnerability to Pacific communities to natural and other hazards and to promote sustainable national development. Subsequent to the endorsement of the Regional DRM Framework, Secretariat of the Pacific Community (SPC) facilitated the establishment of the Pacific DRM Partnership Network to assist Pacific countries with the implementation of initiatives under the framework. The establishment of this partnership has provided Pacific countries with significant DRM opportunities directly through regional and national mechanisms. At the September 2015 Pacific Islands Forum Leaders meeting, the Framework was extended through 2016.

In 2005, Pacific leaders also endorsed **the Pacific Islands Framework for Action on Climate Change (PIFACC) 2006 - 2015**, with the goal of ensuring that Pacific Island peoples and communities build their capacity to be resilient to the risks and impacts of climate change. The guiding principles of this framework comprise: 1) implementing adaptation measure; 2) governance and decision making; 3) improving understanding of climate change; 4) education, training and awareness; 5) contributing to global greenhouse gas reduction; and, 6) partnerships and cooperation<sup>35</sup>. From this SPREP then developed the “Action Plan for the Implementation of the Pacific Islands Framework for Action on Climate Change 2006-2015.” One of the key areas identified under the action plan is to “share lessons learned from best practices in the implementation of climate change programs.” At the September 2015 Pacific Islands Forum Leaders meeting, the Framework was extended through 2016.

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<sup>31</sup> PIRCA, Climate Change and Pacific Islands: Indicators and Impacts, [http://www.cakex.org/sites/default/files/documents/NCA-PIRCA-FINAL-int-print-1.13-web.form\\_.pdf](http://www.cakex.org/sites/default/files/documents/NCA-PIRCA-FINAL-int-print-1.13-web.form_.pdf)

<sup>32</sup> <http://www.adb.org/publications/climate-change-pacific-stepping-responses-face-rising-impacts>

<sup>33</sup> [http://ipcc-wg2.gov/AR5/images/uploads/WGIAR5-Chap29\\_FINAL.pdf](http://ipcc-wg2.gov/AR5/images/uploads/WGIAR5-Chap29_FINAL.pdf) p. 1624.

<sup>34</sup> Acting Today for Tomorrow: A Policy and Practice Note for Climate and Disaster Resilient Development in the Pacific Island Region, World Bank, 2012

<sup>35</sup> [http://www.sprep.org/climate\\_change/pycc/documents/PIFACC.pdf](http://www.sprep.org/climate_change/pycc/documents/PIFACC.pdf)

Both these agreements come to term at the end of 2016. The region is working on the development of the regional **Strategy for Climate and Disaster Resilient Development in the Pacific (SRDP)**. This regional strategy aims to strengthen the resilience of PICs communities “to the impacts of slow and sudden onset natural hazards by developing more effective and integrated ways to address climate and disaster risks, within the context of sustainable development”<sup>36</sup>. SRDP will provide targeted high-level strategic guidance to key stakeholders addressing the challenges posed by climate change and disasters in the Pacific. These include governments and administrations of PICTs, the private sector, civil society organizations, Pacific communities and development partners such as donors, regional and international organizations. The strategy proposes three goals: 1) strengthened integrated risk management to enhance climate and disaster resilience; 2) low carbon development; and, 3) strengthened disaster preparedness, response and recovery. SRDP recognizes that social and economic sectors have a key role in implementing resilience building solutions and aims to ensure a holistic, cooperative and effective approach to risk management. The strategy also outlines an implementation framework including a coordination mechanism - the Pacific Resilience Partnership - that will strengthen coordination of CC and DRM with key partners and stakeholders.

The **Inter-Governmental Panel on Climate Change (IPCC) 5<sup>th</sup> Assessment Report**—the most definitive assessment to date of the current and projected magnitude of climate change – devotes a special section (Chapter 29) to “small islands” because of their extreme vulnerability to climate change impacts. Current and future climate-related drivers of risk for small islands during the 21st century include sea-level rise, tropical and extra-tropical cyclones, increasing air and sea surface temperatures, and changing rainfall patterns. Current impacts associated with these changes confirm findings reported on small islands from the Fourth and previous IPCC assessments. The future risks associated with these drivers include loss of adaptive capacity and ecosystem services critical to lives and livelihoods in small islands. The IPCC’s “Special Report on Managing the Risk of Extreme Events and Disasters to Advance Climate Change Adaptation (SREX),” issued in 2013, reiterates the particular vulnerability of SIDS to extreme weather hazards.

The **Pacific Islands Meteorological Strategy (PIMS) 2012-2021** identifies that “Sustaining weather and climate services in Pacific Island Countries and Territories” are crucial to enhancing resilience to and reducing vulnerability of Pacific Islands’ peoples and communities from natural hazards and the effects of climate variability and climate change. PIMS identifies four priorities for action: 1) improved weather services, in particular aviation, marine and public weather services; 2) improved end-to-end Multi-Hazard Early Warning System (MHEWS); 3) enhanced infrastructure (data and information services) for weather, climate and water; and 4) improved climate services.

Experience and lessons learned by Pacific SIDS are shared with the region and the broader SIDS communities as well as the climate, meteorology and disaster actors through meetings including the **Pacific Meteorology Council Meeting** which annually convenes national governments, stakeholders and partner to review and address climate and disaster threats in the region. Forums such as the **Pacific Humanitarian Partnership (PHP) meeting** also serves as a mechanism to strengthen partnerships between actors, and broadens the network of practitioners who are likely to collaborate in disaster preparedness and response.

The **Sendai Framework for Disaster Risk Reduction 2015 – 2030**, which is the successor of the Hyogo Framework of Action 2005-2015 was adopted at the UN World Conference on DRR held in March 2015. The new Framework reiterates the commitment to address disaster risk reduction and the building of resilience. It has identified the following outcome to be achieved over the next 15 years: “the substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries.” The Framework aims to “prevent new and reduce existing disaster risk through the implementation of integrated and inclusive economic, structural, legal, social, health, cultural, educational, environmental, technological, political and institutional measures that prevent and reduce hazard exposure and vulnerability to disaster, increase preparedness for response and recovery, and thus strengthen resilience”<sup>37</sup>. Priority areas for action include 1) understanding disaster risk, 2) strengthening disaster risk governance to manage disaster risk, 3) investing in disaster risk reduction for resilience, 4) enhancing disaster preparedness for effective response and to “build back better” in recovery, rehabilitation and reconstruction<sup>38</sup>.

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<sup>36</sup> <http://gsd.spc.int/srdp/>

<sup>37</sup> Sendai Framework for DRR 2015-2030, p.12 available at [http://www.preventionweb.net/files/43291\\_sendaiframeworkfordren.pdf](http://www.preventionweb.net/files/43291_sendaiframeworkfordren.pdf).

<sup>38</sup> Ibid, p.12



The **Sendai Framework** states that addressing climate change represents an opportunity “to reduce disaster risk in a meaningful and coherent manner throughout the interrelated intergovernmental processes”<sup>39</sup>. It specifically highlights that it is important to:

- enhance “the development and dissemination of science-based methodologies and tools to record and share disaster losses and relevant disaggregated data and statistics, to strengthen disaster risk modelling, assessment, mapping, monitoring and multi-hazard early warning systems”(part of Priority 1)<sup>40</sup>;
- promote “mechanisms for disaster risk transfer and insurance, risk-sharing and retention and financial protection, as appropriate, for both public and private investment in order to reduce the financial impact of disasters on Governments and societies, in urban and rural areas”<sup>41</sup> and “the integration of disaster risk reduction considerations and measures in financial and fiscal instruments” (part of Priority 3)<sup>42</sup>; and,
- strengthen further “disaster preparedness for response, take action in anticipation of events, integrate disaster risk reduction in response preparedness and ensure that capacities are in place for effective response and recovery at all levels” (Priority 4)<sup>43</sup>.

The 3<sup>rd</sup> International Conference on Small Island Developing States held in Samoa in September 2014 considered “Climate Change & Disaster Risk Management” one of the six priority areas for action in SIDS<sup>44</sup>. The **SAMOA Pathway Outcome Document** recognizes the adverse impacts of climate change and sea-level rise on SIDS’ efforts to achieve sustainable development as well as to their viability, economic development, and food security. The document emphasizes adaptation to climate change as an immediate and urgent global priority. The SAMOA Pathway acknowledges the leadership role of SIDS in advocating for ambitious global efforts to address climate change, raising awareness at the global level, making efforts to adapt to the intensifying impacts of climate change, and in further developing and implementing plans, policies, strategies and legislative frameworks with support where necessary<sup>45</sup>.

The document calls attention to efforts of SIDS to : a) build resilience to the impacts of climate change and to improve their adaptive capacity through the design and implementation of climate change adaptation measures appropriate to their respective vulnerabilities and economic, environmental and social situations; b) improve the baseline monitoring of island systems and the downscaling of climate model projections to enable better projections of the future impacts on small islands; and, c) raise awareness and communicate climate change risks, including through public dialogue with local communities, to increase human and environmental resilience to the longer-term impacts of climate change, among others.

Recognizing that disasters can disproportionately affect SIDS the SAMOA Pathway identifies the critical need to build resilience, strengthen monitoring and prevention, reduce vulnerability, raise awareness and increase preparedness to respond to and recover from disasters. The documents highlights the importance of support for SIDS to: (i) gain access to technical assistance and financing for early warning systems, disaster risk reduction and post-disaster response and recovery, risk assessment and data, land use and planning, observation equipment, disaster preparedness and recovery education programmes and disaster risk management; (ii) promote cooperation and investment in disaster risk management in the public and private sectors; (iii) strengthen and support contingency planning and provisions for disaster preparedness and response; (iv) mainstream policies and programmes related to disaster risk reduction, climate change adaptation and development; (v) harmonize national and regional reporting systems; (vi) establish and strengthen risk insurance facilities; and, (vii) increase participation in international and regional disaster risk reduction initiatives.

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<sup>39</sup> Ibid, p. 11.

<sup>40</sup> Ibid, p.16.

<sup>41</sup> Ibid, p.19.

<sup>42</sup> Ibid, p.20.

<sup>43</sup> Ibid, p.21.

<sup>44</sup> <http://www.sids2014.org/index.php?menu=1553>

<sup>45</sup> [http://www.un.org/ga/search/view\\_doc.asp?symbol=A/RES/69/15&Lang=E](http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/69/15&Lang=E)

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### III. PROBLEM DESCRIPTION

The UNDP Human Development Report 2014 makes the case that “sustained enhancement of individuals’ and societies’ capabilities is necessary to reduce persistent vulnerabilities—many of them structural and many of them tied to the life cycle. Progress has to be about fostering resilient human development<sup>46</sup>.” The emphasis on resilience draws attention to the role that institutions, structures and norms can play in enhancing people and communities’ ability to cope and adjust to adverse events. The concept of resilience increasingly underpins the international community’s approach to securing human development.

There is an increasing call to make risk reduction a central dimension of the development agenda, as a way to ensure that disasters and climate change do not derail development progress or development strategies do not inadvertently create new risks<sup>47</sup>. Risk reduction is understood as a way to protect investments in development as well as an opportunity to shift development to building resilience. Risk-informed development and planning decisions is directly related to “the way in which the public authorities, civil servants, media, private sector and civil society coordinate at community, national and regional levels, in order to manage and reduce disasters and climate-related risks. This means ensuring that sufficient levels of capacities and resources are made available to prevent, prepare for, manage and recover for disasters. This also entails mechanisms, institutions, and processes for citizens to articulate their interests, exercise their legal rights and obligations and mediate their differences”<sup>48</sup>.

Risk informed development also entails different partnership arrangements that are conducive for a holistic approach across sectors and levels. DRR is often delivered through stand-alone investments and projects which are not necessarily coordinated leading to incoherent programming and potential for gaps in key areas. There are limited synergies between DRR and other programmatic areas like climate change adaptation, sustainable energy, and eco-system management. The goals and ambition of the Sendai Framework require a step change to prioritize DRR at the scale required.

Greater effort is needed to develop a stronger climate and disaster risk management culture in the Pacific if people are to implement and sustain risk reduction measures – this is essential to minimising future potential losses. In particular government and communities need to better understand the risks natural hazards pose to people, economic assets and the environment, and to implement pre-emptive measures that reduce climate related disaster losses.

In the lead up to Sendai, the PICs governments, through their HFA progress reports<sup>49</sup>, highlighted a range of capacity gaps and institutional issues that were hindering more effective disaster resilience, response and recovery in the Pacific. These include:

- Insufficient understanding of the full spectrum of risks and potential economic losses posed by extreme weather events or the degree to which future climate change will intensify these risks;
- Lack of integration of disaster risk reduction and management considerations into national and sector development planning processes;
- Small number of trained personnel that can produce reliable short term and seasonal weather forecasts limiting their ability to effectively monitor and identify weather related risks;
- Weak climate monitoring capacity and insufficient number of reliable meteorological and hydrological monitoring stations to collect climate and environmental information through an integrated network;
- Lack of sufficient technical capacity and support infrastructure to effectively operate, maintain and repair weather monitoring stations;
- No established national standard operating procedures to guide how early warning alert information presented and distributed to officials in relevant government ministries;
- Early warnings presented in a technical or non-user friendly manner, and thus not meeting the needs of government agencies and the communities at risk;
- Limited human and financial resources reduce the ability to manage post disaster recovery efforts;

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<sup>46</sup> UNDP (2014). Human Development Report. New York.

<sup>47</sup> Kellet, Jan (2014). The future framework of disaster risk reduction. ODI.

<sup>48</sup> <http://www.undp.org/content/dam/undp/library/crisis%20prevention/ODI%20UNDP%20DRG%20Final.pdf> p.4.

<sup>49</sup> From <http://www.preventionweb.net>

- Government and community assets are not adequately insured and few have, or have access to, financing reserves to fund post disaster recovery.

Risk-informed development planning for the reduction of climate and disaster risk involves the ability to track climatic patterns, monitor and assess long-term hazards, inform and educate the decision-makers as to the impact of these hazards, and work with key sectors to undertake informed policy, planning and program decisions that protect vital economic assets at the national and sub-national level. This also includes identifying and implementing appropriate preparedness measures and systems, and to more explicitly incorporate recovery planning as a critical component to ensure national and community well-being and resilience. Failure to do so will increase the probability that they will face even greater economic losses in the coming decades and undermine their ability to achieve development objectives.

Among other issues limited human and financial resources and dispersed geography constrain the ability of the PICs to effectively manage climate and disaster risk, and post disaster recovery efforts. At present most PICs are not well placed to independently manage climate risk and post disaster recovery; external assistance from donors and regional technical support agencies is, and will remain, essential to meeting their basic needs in these areas for some time.

Through support provided by UNDP, regional technical agencies, and other development partners the region has made some progress in building climate monitoring, disaster risk reduction and post disaster response capabilities in recent years. However, it is evident that significant capacity gaps still remain. Key areas for improving PICs capacities include strengthening climate services through climate early warning systems, developing post disaster recovery processes and establishing risk financing mechanisms that increase ability to recover from disaster impact.

### **Strengthening Early Warning Systems and Climate Monitoring**

Early warning is a major element of disaster risk reduction, preventing loss of life and reducing the material and economic impact of a disaster. Its importance relies in the timely provision of disaster risk information, allowing guidance on how to act upon warnings, ensuring a constant state of preparedness<sup>50</sup>. According to the UNISDR terminology (UNISDR, 2009), an Early Warning System (EWS) is “the set of capacities needed to generate and disseminate timely and meaningful warning information to enable individuals, communities and organizations threatened by a hazard to prepare and to act appropriately and in sufficient time to reduce the possibility of harm or loss”. An effective EWS is comprised of risk knowledge, monitoring and warning service, dissemination and response capacity<sup>51</sup>. Timely warning regarding climate-related hazards is extremely important, making the provision of meteorological and climate services a key component for DRR.

According to the Global Framework for Climate Services (GFCS), climate information is most useful when applied to risk assessment, loss data, early warning systems, risk reduction in sectors, disaster risk reduction, financial planning and investment, and risk financing and transfer<sup>52</sup>. Climate services refer to the production and delivery of useful climate data and information to government, business planners, service providers, and communities so that they can manage the risks of climate variability and change<sup>53</sup>. Successful implementation of the GFCS depends on: 1) engaging risk reduction leaders; 2) establishing partnerships with potential implementation partners; 3) developing and delivering projects that address identified gaps in climate information to reduce disaster risk and improve collaboration; 4) strengthening regional and national climate service providers’ capacities; 5) ensuring coordination of GFCS with other global, regional, national and local actors; and, 6) developing the institutional and policy setting<sup>54</sup>.

Public institutions are seeking the tools and the knowledge for climate and disaster risk management. National governments and decision/policy makers at regional and local communities’ levels are asking how they can better manage climate related risks and opportunities. Demand for useful knowledge and information is

<sup>50</sup> <http://www.unisdr.org/2006/ppew/info-resources/ewc3/checklist/English.pdf>

<sup>51</sup> <http://www.preventionweb.net/english/hyogo/gar/2015/en/bgdocs/WMO.%202014a.pdf>

<sup>52</sup> [http://www.gfcs-climate.org/sites/default/files/Priority-Areas/Disaster%20risk%20reduction/GFCS-DISASTER-RISK-REDUCTION-EXEMPLAR-FINAL-14467\\_en.pdf](http://www.gfcs-climate.org/sites/default/files/Priority-Areas/Disaster%20risk%20reduction/GFCS-DISASTER-RISK-REDUCTION-EXEMPLAR-FINAL-14467_en.pdf)

<sup>53</sup> [http://www.gfcs-climate.org/sites/default/files/GFCS\\_3-fold\\_flyer\\_July2014\\_EN.pdf](http://www.gfcs-climate.org/sites/default/files/GFCS_3-fold_flyer_July2014_EN.pdf)

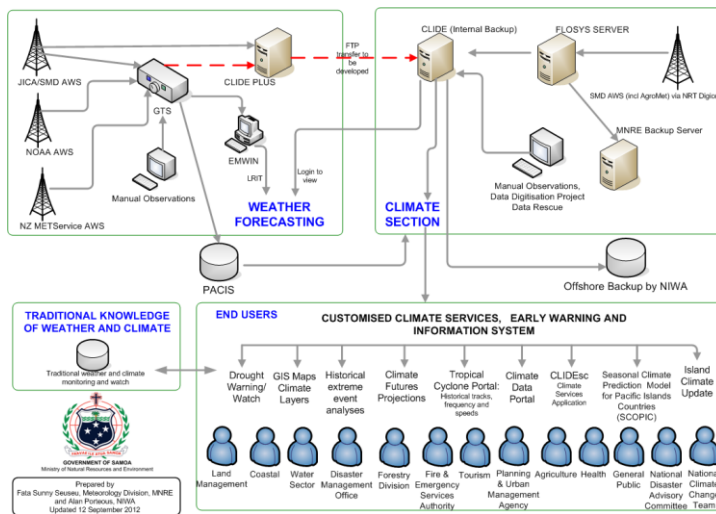
<sup>54</sup> Ibidem

increasing. A large proportion the PICs population live in rural communities and dispersed over many islands and need different sets of approaches to deliver climate services to them.

The role of national meteorological services (NMSs) is essential in providing weather and climate services for understanding climatic risks, sustaining livelihoods, and strengthening economic growth. The development of key areas such as agriculture, fishing, water resources, transportation and tourism are supported by meteorological capacity. Meteorological services are crucial to enhancing resilience to and reducing vulnerability from natural hazards and the effects of climate variability and climate change.

PICs have seen significant development and general improvement in meteorological and climate services and capabilities over the past decade. Despite the progress made, much remains to be done to bring many NMSs to the levels where they can meet mandates and serve national interest effectively. Current capacity at the national level varies greatly; many NMSs in the region operate with poor infrastructure and limited capacity. Gaps exist in climate data gathering, archiving and integrating data. In a number of instances, PICs rely mainly on external support to provide basic climatological services.

To address PICs’ challenges, Pacific Island Meteorological Strategy identifies four priority areas for action<sup>55</sup>: 1) improved weather services, in particular aviation, marine and public weather services; 2) improved end-to-end Multi-Hazard Early Warning Systems (MHEWS); 3) enhanced infrastructure (data and information services) for weather, climate and water; and 4) improved climate services. This latter point is articulated as improved delivery of climate services at national and community levels, development of operating procedures for climate information, drought prediction, and early warning systems and a high demand for seasonal forecasts that are both sector and community specific. The Pacific Climate Services Forum (2013) identified the need for transferable information, methodologies and technologies, downscale projections, improvements to services to inform crop and agricultural decisions and water resource management, development of risk scenarios and capacity and training for use of climate services, among others<sup>56</sup>.



Strengthening climate early warning systems (CLEWS) is an important means of reducing the potential loss and damage from extreme weather events and climate variability. On the NMS side, an effective CLEWS system ensures adequate EWS related infrastructure for weather forecasting combined with data digitalization, integration and analysis. The objective is to provide the best-tailored climate information and timely warnings timely to sectors and community end-users so they can incorporate climatic information into policy, programming and decision-making. In Samoa, CLEWS aimed to increase resilience and adaptive capacity of Samoa’s meteorological, agricultural and health sectors to adverse climate impacts, to inform planning and operations, and assist in disaster risk reduction initiatives. Significant progress has been made in strengthening the capacity of the NMS to observe, capture and communicate weather and climate data to public sector and community end-users. On the sector side, an effective CLEWS systems means greater familiarization of sector experts with climate risk, increased engagement with meteorological services to identify needs, climate-relevant data collection, climate-informed planning and communication of climate-risks to community

<sup>55</sup> Ibid

<sup>56</sup> [http://docs.lib.noaa.gov/noaa\\_documents/CoRIS/PICSF\\_outcomes-and-report.pdf](http://docs.lib.noaa.gov/noaa_documents/CoRIS/PICSF_outcomes-and-report.pdf)

members.

Consultations with NMS and Ministries identify need for further access and improved climate products, tracking number and type of CLEWS users, maintenance of CLEWS infrastructure and strengthening NMS capacity to tailor and communicate climate information. Meteorological and climatic information must be communicated horizontally to Line Ministries and vertically down to community members, with mechanisms and communication methods that can be understood and applied by users. Non-technical modes of disseminating climate information and awareness and training for agriculture and health-related sectors is a priority. The sector end-user must be able to integrate climate information into management plans and strategies, resulting in reduced impact of climate variability and change at a community level. The farmer must understand how extreme weather events or an increase in temperature will affect crop yield, and what measures s/he can take to maintain livelihood. The community health worker must understand the relationship between increase temperature and rainfall, and dengue epidemics. Additionally, the existing experience in climate early warning system in selected countries suggests sector engagement, coordination and support, and financial commitment of beneficiary governments for sustainability remain a challenge.

Risk-informed development means that technical climatic information is understood and applied by the end-user. At present the capacity of the PICs to collect, analyse and generate climate related information and early warnings on emerging threats, and to effectively disseminate this information to relevant end-users is limited. National Meteorological Services identify the need for a) communicating climate information to high level stakeholders; b) climate data rescue, quality control, and storage; c) basic and advanced climate science and variability research; d) graphical presentation of climate information; e) tailoring developing climate products and applications for specific sectors; f) greater focus on media outreach to raise the profile of climate products and services; and, g) greater community engagement about climate services available and how these can be used to prepare for the season ahead.<sup>57</sup> Other priorities include scientific research on climate change topics, developing more tailored climate services for different stakeholders, climate drivers affecting climate change, production of GIS map layers, drought modules, statistics, analysis of climate models, and how to communicate uncertainty in climate forecasts. This project aims to support capacity development efforts in these areas.

### **Preparedness and Planning to Manage Recovery**

Although early warning systems, preventative measures and increased disaster preparedness can significantly reduce the risks posed by natural hazards, it is clear that extreme weather events will happen and will continue to result in loss and damage. The projected increase in the frequency and intensity of extreme weather events that will accompany climate change is likely to further exacerbate hazard risk and increase potential losses. As a result effective recovery defined as: the restoration and improvement of “*facilities, livelihoods and living conditions of disaster-affected communities, including efforts to reduce disaster risk factors*”<sup>58</sup> will be increasingly important.

Recovery also represents a valuable opportunity to build resilience to future disasters and to apply the “build back better” principle<sup>59</sup>. However, to be effective, recovery should be based on pre-existing strategies, policies and plans that clearly define institutional responsibilities for recovery action, promote cross-sectoral coordination, and respond to locally identified needs in other words good recovery governance or recovery preparedness.

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<sup>57</sup> Fiji Climate Services Learning and Development Plan 2014 – 2016.

<sup>58</sup> [http://www.unisdr.org/files/7817\\_UNISDRTerminologyEnglish.pdf](http://www.unisdr.org/files/7817_UNISDRTerminologyEnglish.pdf)

<sup>59</sup> Ibid

**Pre-disaster recovery preparedness and planning** anticipates events and proactively builds national institutional arrangements, capacities, strategies, procedures, and plans before a disaster occurs<sup>60</sup>.

Recent experiences have shown that the limited effectiveness of recovery is generally due to a lack of leadership, planning, coordinated assessment, and effective management. Institutional constraints, gaps in communication, insufficient funding and limited access to capacity and knowledge can additionally undermine recovery effectiveness.



**The Pre-planning process.**

Source: [http://www.recoveryplatform.org/assets/Guidance\\_Notes/PDRP.pdf](http://www.recoveryplatform.org/assets/Guidance_Notes/PDRP.pdf)

Addressing the governance of recovery and developing clear recovery processes is critical for ensuring timely, coordinated, appropriate, resilient and sustainable recovery solutions in the medium to long term. The pre-arrangement of recovery governance (policies, structures and processes at all levels) is therefore essential to: i) provide more timely support to communities impacted by disasters; ii) allow for the re-allocation of national development budgets; and iii) help access support from international partners. Good disaster governance and preparedness is an essential foundation for good post disaster recovery<sup>61</sup>.

**Post Disaster Recovery** is defined as “*decision and actions taken after a disaster with a view to restoring or improving the pre-disaster living conditions of the stricken community by encouraging and facilitating necessary adjustments to reduce disaster risk.*”<sup>62</sup> Post Disaster Recovery is about taking a forward-looking approach to addressing the longer term needs of disaster affected communities and should be implemented in the response phase continuing to the restoration of a functioning society.

Post-disaster recovery is a complex multi-dimensional process that involves many stakeholders from regional, national and local level, including actors from international cooperation. Recovery helps communities move from relief and response and emphasizes the importance of capacity development and skills to strengthen resilience to future disasters.

One of the tools available to support post-disaster recovery is the Post-Disaster Needs Assessment (PDNA)<sup>63</sup>. The PDNA is an integrated framework for assessing disaster effect and impact across all sectors (social, infrastructure, productive, human and social development, macro economy, finance, crosscutting sectors); the main goals of a PDNA is to assess the full extent of a disaster’s impact on the country and, to produce an actionable and sustainable Recovery Strategy for mobilizing financial and technical resources. PDNAs have been conducted in the Pacific region in Samoa (2009, post tsunami), Fiji and Samoa (2013, post Tropical Cyclone Evan), and in Vanuatu (2015 post Cyclone Pam) and Fiji (2016 post Cyclone Winston).

The effectiveness of post disaster recovery will be strengthened by investment in pre-disaster recovery preparedness. The United Nations Secretary-General’s (2005) Report on “Strengthening the Coordination of Emergency Humanitarian Assistance of the United Nations” and related studies highlight a persistent recovery gap between emergency response and ongoing development interventions.<sup>64</sup> Although there has been an increased focus globally on contingency planning and emergency response, inadequate attention has been devoted to developing national capacities for financing and managing recovery in the Pacific. Recent

<sup>60</sup> [http://www.recoveryplatform.org/assets/Guidance\\_Notes/PDRP.pdf](http://www.recoveryplatform.org/assets/Guidance_Notes/PDRP.pdf)

<sup>61</sup> UNDP Discussion paper, May 2015.

<sup>62</sup> [http://www.preventionweb.net/files/32306\\_32306guametodoljicaparaprososdepl.pdf](http://www.preventionweb.net/files/32306_32306guametodoljicaparaprososdepl.pdf)

<sup>63</sup> [http://www.recoveryplatform.org/pdna/pdna\\_guide](http://www.recoveryplatform.org/pdna/pdna_guide)

<sup>64</sup> UN Development Group (UNDG), the World Bank (WB) and the European Union (EU) collaborated to develop the Post-Disaster Needs Assessment (PDNA) tool in 2009.

<sup>64</sup>“From 2000 to 2008, the agencies believe, rich governments devoted 20 percent of all aid spending to disaster relief work. By contrast, donor agencies spent just 0.1 percent of the global aid budget to natural disaster prevention in 2001” (New York Times - <http://www.nytimes.com/cwire/2010/11/11/11climatewire-un-and-world-bank-report-says-act-now-or-pay-67256.html>)

experience of post disaster recovery efforts in the Pacific shows that post disaster recovery has in general been slow, poorly managed and resourced, and little attention has been given to assisting communities to recover and restore livelihoods after the immediate response phase.

There are clear challenges in the Pacific in terms of recovery, which include: i) significant difference in the quality of recovery and reconstruction when compared to the initial humanitarian response and poor transition between the two; ii) delays in recovery - leaving survivors in temporary accommodations without access to services, infrastructure and livelihood options; and iii) a lack of planning, coordinated assessment, effective management, institutional constraints, and gaps in communication.

Recent consultations also highlighted little national ownership of recovery processes, weak coordination by regional actors, lack of capacity in recovery assessments, minimal tracking or monitoring of recovery implementation, scarce resources for recovery programming, and no installed capacity at a national or regional level to provide coordination and technical support<sup>65</sup>. Challenges with PDNA's also include lack of regional expert pool and lack of familiarization with the PDNA tool at a national and regional level. When disasters happen, and post crisis recovery is not well managed, existing vulnerabilities can be perpetuated, establishing a vicious circle of incomplete recovery processes that further generates conditions for disasters.

Strengthening the capacity of the PICs to prepare for recovery and manage, coordinate and implement post disaster response and recovery measures therefore remains a critical area for additional external support.

### **Use of Financial Instruments to Manage Disaster Risk**

The 2013 Global Assessment Report on Disaster Risk Reduction (GAR13) focused on how public regulations and private investments shape disaster risk. The way in which businesses, governments, investors and insurers assess disaster risk is crucial for taking risk informed decisions about investments in hazard-exposed areas, as well as for promoting investments for reducing risks. In this regard, risk governance, as a systemic approach for decision-making in the field of risk reduction, is important for both business and the public sector. The governments can play a key role in combining the promotion of local and national economic growth with effective disaster risk management on the ground, especially if they support the creation of incentives for risk sensitive investments. Many countries have legislation for risk sensitive investments and development, increasing budget allocations for disaster risk management<sup>66</sup>.

Risk financing comprises "a set of measures designed to shift the mobilisation of funds away from ad hoc efforts in the wake of a crisis, and towards a risk-informed strategy to secure access to funds in advance of anticipated crisis events, effectively smoothing the financial impact of post-crisis response and recovery over time. Risk financing mechanisms include savings and reserves, access to credit and risk transfer products such as insurance and catastrophe bonds"<sup>67</sup>. For financing recovery, governments generally have access to various sources of financing following a disaster, including ex-post and ex-ante financial mechanisms. The main post-disaster financial mechanisms governments use include donor assistance (relief and reconstruction), budget reallocation, domestic credit, and tax increase, while ex-ante sources include budget contingencies, reserve fund, contingent debt facility, parametric insurance, CAT-Bonds, and traditional insurance<sup>68</sup>. In the Pacific there is a reliance on "ex-post" instruments for financing recovery, especially budget allocation and donor assistance.

In the Pacific Islands in recent years some progress has been made in increasing the use of financial instruments to manage risk. For example, the World Bank, ADB and SPC have established the Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI) which aims to increase the use of market based financing instruments to enable the PICs to better manage and share risk. Through PCRAFI the Pacific Catastrophe Risk Insurance Pilot has been established which enables the six participating PICs to pool risk

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<sup>65</sup> UNDP Discussion Paper, May 2015

<sup>66</sup> GAR13, cap. 14 at <http://www.preventionweb.net/english/hyogo/gar/2013/en/gar-pdf/chap14.pdf>

<sup>67</sup> Future Humanitarian Financing, *What is risk financing?*

<sup>68</sup> <http://eird.org/cd/recovery-planning/docs/6-handouts-for-printing/14-Financing-Recovery.pdf>

and be eligible for rapid emergency payments in the event of a major disaster<sup>69</sup>. This has resulted in a 50% reduction in premiums relative to independent insurance cover; Tonga and Vanuatu have benefited from the scheme.

The Pacific Disaster Risk Financing and Insurance Program (PDRFI) is one application of the PCRAFI that assists PICS to improve their financial response capacity post-disaster through public financial management and implementation of market-based sovereign catastrophe risk insurance solutions. The PDRFI Program has a three-tiered Disaster Risk Financing Strategy associated with different levels of risk: a) self-retention, such as a contingency budget and national reserves, to finance small but recurrent disasters; b) a contingent credit mechanism for less frequent but severe events; and c) disaster risk transfer to cover major natural disasters<sup>70</sup>. "Advancing Disaster Risk Financing in the Pacific" recommends that developing and integrated disaster risk financing and insurance strategy, developing a post-disaster budget execution manual to improve awareness of post-disaster procedures, exploring the use of contingent credit for additional liquidity post-disaster, developing an insurance program for key public properties, and developing a regional framework for DRFI<sup>71</sup> are key steps in addressing disaster risk financing in the Pacific.

Through PCRAFI most PICs have developed risk profiles, supported by a comprehensive regional data base (the Pacific Risk Information System - PRIS) that documents key assets at risk, losses from past disasters, vulnerability maps and a range of other important information. Improved information on risk and vulnerability is an essential input to decision makers in terms of identifying the type and extent of insurance cover needed to cost effectively manage risk, and to private insurance companies in establishing appropriate premiums. These country risk profiles will provide essential material for assessing this project's interventions in disaster risk financing, pointing to the need for support the establishment of sector-specific insurance schemes as well as facilitate the development of business continuity plans for the small to medium business enterprises that experience significant disaster losses but may not have access to insurance to assist them to recover.

Recovery Funds represent a valid ex-ante financial instrument to address disaster impact, in a proactive advance planning perspective. Ex-ante financing provides an element of financial certainty during a disaster, representing a source of immediate money in case of a disaster, being accessible from 1 to 3 months after the disaster, so that essential relief work commences immediately<sup>72</sup>. Pacific experience with National Recovery funds vary accordingly to the respective financial legislation. Samoa, for example, has an emergency fund only once a disaster has occurred, and funds are then reallocated accordingly, while the Marshall Islands have annual contribution. In the Cook Islands the experience of Tropical Cyclone Pat opened the discussion on establishing a disaster reserve fund, leading to the creation of the Emergency Response Trust Fund in 2011<sup>73</sup>.

Insurance has a major influence on business investment decisions and behavior and is one of the main financial tools for households and companies to strengthen their disaster resilience. This is achieved by spreading the risk of exceptional disaster loss among a large number of policyholders and over a long time. Insurers compensate disaster damages in return for the premiums each insurance buyer paid ex-ante. Insurance rarely guarantees business continuity or protects businesses from the wider impacts of disaster, but it provides a buffer and increases local economic livelihood.

The governments' role is to regulate insurance market, framing its functioning, acting as reinsurer and sometimes selling directly insurance to citizens and companies.<sup>74</sup> This option of public sector specific insurance systems is another area for research and support in the Pacific. Many islands do not have, for example, crop insurance for agriculture despite its centrality to livelihoods and food security. This is due to a number of challenges that insurers are facing in this market segment: (a) lack of expertise in agricultural insurance, (b) difficulty to obtain reinsurance cover, (c) small agricultural value chains, (d) heterogeneity of farmers, (e) low levels of organization in agriculture, (f) high risk exposure, and (g) unavailability of historical

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<sup>69</sup> Vanuatu, Solomon Islands, Tonga, Republic of the Marshall Islands (RMI), Solomon Islands and Samoa are covered by the pooled risk insurance scheme.

<sup>70</sup> [https://www.gfdrr.org/sites/default/files/publication/2015.06.25\\_PCRAFI\\_Combined-%5BCompressed%5D-rev-0.9.pdf](https://www.gfdrr.org/sites/default/files/publication/2015.06.25_PCRAFI_Combined-%5BCompressed%5D-rev-0.9.pdf), p.31.

<sup>71</sup> [https://www.gfdrr.org/sites/default/files/publication/2015.06.25\\_PCRAFI\\_Combined-%5BCompressed%5D-rev-0.9.pdf](https://www.gfdrr.org/sites/default/files/publication/2015.06.25_PCRAFI_Combined-%5BCompressed%5D-rev-0.9.pdf), p.4.

<sup>72</sup> [https://www.gfdrr.org/sites/default/files/publication/2015.06.25\\_PCRAFI\\_Combined-%5BCompressed%5D-rev-0.9.pdf](https://www.gfdrr.org/sites/default/files/publication/2015.06.25_PCRAFI_Combined-%5BCompressed%5D-rev-0.9.pdf), p.14.

<sup>73</sup> [https://www.gfdrr.org/sites/default/files/publication/2015.06.25\\_PCRAFI\\_Combined-%5BCompressed%5D-rev-0.9.pdf](https://www.gfdrr.org/sites/default/files/publication/2015.06.25_PCRAFI_Combined-%5BCompressed%5D-rev-0.9.pdf), p.14., p.19.

<sup>74</sup> Gar 13, part 3, cap 13 at <http://www.preventionweb.net/english/hyogo/gar/2013/en/gar-pdf/chap13.pdf>



production and loss records for many value chains<sup>75</sup>. There is a need to support the development of sufficient public and private sector capacity in this field through exposure visits, training and other measures; steps would involve supporting select PICs government to establish a working group to study the feasibilities for micro-level insurance products in detail, conducting a detail crop insurance demand study and a business plan for sector-specific products would contribute to the implementation of a sector-specific insurance scheme. Assistance with training of private sector insurers would also be a priority.

Likewise, disaster risk insurance is not available to small and medium private enterprises (SMEs) in the Pacific such as family tourism operations. Although businesses may be impacted heavily by disaster risk, risk management in the business sector continues to focus only on financial, economic and legal risks. Disaster risk is still rarely considered and small enterprises usually do not undertake systematic risk assessments and plan for risk avoidance, risk reduction, risk transfer or risk acceptance<sup>76</sup>. Having a business contingency plan in place helps ensure business performance after major event. SMEs are more likely to lack risk awareness or struggle to find the capacity to manage disaster risks, due to financial, human resource and technical limitations.

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#### **IV. INTERVENTION LOGIC**

The proposed approach acknowledges the importance of planning and preparing for climate and disaster risk, and ensuring that PICs have the capacity to mitigate, withstand and spring back from the impacts of a disaster event. This project enables the Pacific region to support efforts for resilient recovery and development; making risk central to development processes allows for greater articulation, coordination and alignment with the disaster and climate risk management practices and ensuring that capacity, information access and analysis are elevated to ensure risk-informed decision-making, planning and actions.

##### **Geographical coverage and implementation period**

The project will be implemented during a 3-year period (June 2016 to June 2019). Fourteen countries in the Pacific region will be eligible for support from this project: Cook Islands, Federated States of Micronesia (FSM), Fiji, Niue, Republic of the Marshall Islands (RMI), Samoa, Tonga, Tuvalu, Vanuatu, Palau, Kiribati, Papua New Guinea (PNG), Nauru and Solomon Islands and one Territory: Tokelau. Some of the project elements will be available to all PICs (ie technical assistance in recovery); other activities such as CLEWS and national recovery planning anticipate targeting three countries in each respective output area, according to exposure and incidence of disasters, project criteria and where the project would add maximum value. The target countries will be identified during the inception phase based on a peer-reviewed criteria.

##### **National and Regional Approach**

The project contemplates a two-prong approach, staging interventions at *a) regional* and *b) national* levels to engage national and regional institutions in the achievement of results. The project will build on the existing institutional strengths and contribute approaches, mechanisms and tools to further their development. The project will take advantage of UNDP's presence at the global, regional, as well as at a national level, to provide a strong working relationships with key stakeholders across the Pacific. The project will utilize UNDP's technical expertise to ensure coherent design, high quality and timely delivery, improved communications and information flow, and regional coordination. UNDP will explore partnerships with agencies such as IFRC, SPC, SPREP, WMO, GFDRR, UNISDR and OCHA to enable project implementation that builds on respective regional strengths and initiatives.

The project aims to improve capacity for climate services, post-disaster recovery and financial mechanisms at both a regional and national level, in each of the output areas (See Annex 1: Regional and National):

- To increase capacity to address climate variability, the project will build on and strengthen national level *preparedness and early warning systems* for key sectors (5-10-50 pathway 3). The project will support preparedness and climate early warning services in a maximum of three countries.

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<sup>75</sup> FAO (2014). Feasibility Study for the Introduction of Agriculture Insurance in Fiji.

<sup>76</sup> Gar 13, part 3, cap 11, <http://www.preventionweb.net/english/hyogo/gar/2013/en/gar-pdf/chap11.pdf>

Experiences will be shared at a regional level through the Pacific Met Council meetings, regional Climate Outlook Forums and through documentation of national case studies.

- To increase national *capacity for resilient recovery*, the project proposes to collaborate with three national governments to strengthen institutional capacities to plan for recovery process, which would identify priority sectors, establish baselines<sup>77</sup> to facilitate recovery planning and monitoring, assess critical infrastructure, establish recovery coordination mechanisms and develop recovery plans (5-10-50 pathway 4). National actors will also be trained in recovery assessment. At a regional level, the project will support the Pacific Humanitarian Team to provide technical assistance and support recovery coordination for effective post-disaster intervention; regional actors will be able to integrate recovery into the humanitarian phase, through development and use of integrated assessment tools.
- To increase capacity for resilient recovery, the project will *facilitate the uptake of financial instruments* for governments to use to better recuperate and return to normality following a disaster event (5-10-50 pathway 4). Emphasis will be placed on promoting sector-specific insurance schemes at the national level and the use of business continuity planning for small and medium private enterprises, working in select PICs. At a regional level, the project will establish a seed recovery funding facility that will support governments to implement their recovery plans, working with selected local governments, NGOs and private sector partners. The project will explore the possibility of creating a multi-donor recovery trust fund, using this seed funding facility as a pilot.

### **Inception and Conclusion Phases**

The recommended first step for project implementation is an inception phase. A three-month inception phase at the beginning of the project is intended to bring stakeholders and partners together for more detailed project design, activity and work plans, targets and indicator development. The inception phase would:

- Analyze the key needs and capacities relating to climate risk and recovery needs in the PICs;
- Getting support from all stakeholders as to the scope and objectives of the project;
- Identify PICs that meet project criteria for national level activities;
- Design activities, sequencing and work plans;
- Identify resources and operating constraints;
- Agree upon knowledge exchange instruments; and
- Identify strategic partnerships with other regional and international agencies.

An inception phase will ensure that project design has the support of national and regional stakeholders, identifies roles and responsibilities, and provides viable solutions to identified gaps in the Pacific.

The end of the project will provide an opportunity to share lessons learned from countries piloting activities under respective outputs, as well as the dissemination of final evaluation findings through a final project meeting and the UNDP knowledge network on climate change and disaster risk reduction.

### **Existing Linkages**

The project, in alignment and coherent with the 5-10-50 Partnership Framework for Risk Informed Development<sup>78</sup> intends to strengthen existing linkages to further disaster and climate risk resilience and recovery in the Pacific. Proposed activities will complement existing projects and partnerships, such as World Bank's Pacific Resilience Program (PREP), Secretariat of the Pacific's PCRAFI phase II, WMO's Climate Forum pilot, UNDP's global Integrated Climate Risk Management Programme, and UNDP's Pacific Risk Resilience Program (PRRP). Regional meetings such as the Pacific Meteorology Council and Climate Regional Outlook Forum meeting provide forums for not only sharing ideas across the region but also spaces to convene stakeholder and project board meetings for efficient project management. The project will also build on lessons, guidelines, training materials and best practices from UNDP's projects for Preparedness for Recovery.

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<sup>77</sup> Ensuring adequate baseline data, is a critical part of preparing for a recovery process, as it serves to compare with post disasters conditions in an affected country. Useful baseline data usually include: pre-disaster demographic, socio-economic, geographic, ethnic and cultural information; pre-disaster data for each sector; nature and extent of pre-disaster hazards, vulnerabilities and risks; national/regional/ local development plans, socio-economic goals in the short term, and poverty reduction strategies.

<sup>78</sup> [http://www.undprlearning.org/uploads/5/4/5/1/54519117/5-10-50\\_concept\\_draft\\_march2015.pdf](http://www.undprlearning.org/uploads/5/4/5/1/54519117/5-10-50_concept_draft_march2015.pdf)

Two key partner organizations are the Secretariat of the Pacific Community (SPC), which is the lead CROP DRM coordination agency in the region, and the Secretariat of the Pacific Regional Environment Programme (SPREP) which implements a meteorological support program. The New Zealand Meteorological Service and the Australian Bureau of Meteorology also have various levels of investment in the Pacific. Close cooperation with these agencies will be essential during detailed design and project implementation to ensure country level assistance is well coordinated, targeted at identified gaps and needs, and delivered as part of an integrated package of support at the national and regional level.

The project will deliberately seek to minimize duplication and build on tested experiences to date. In the area of climate early warning systems, the project will work with countries that have piloted CLEWS or laid the foundation for climate services; WMO and SPREP will provide guidance to maximize climate service investment. In the area of recovery, the project will collaborate with OCHA to strengthen the Pacific Humanitarian team and provide leadership in recovery as well as work with SPC to improve PDNA processes. The project will also utilize the lessons learned from activities in Vanuatu (Tropical Cyclone Pam), specifically drawing on the efforts to restore livelihoods (coffee plantations and handicrafts) and debris cleanup made possible by Russia's contribution to recovery. In the area of disaster risk financing, the project will aim to collaborate with UNISDR and the UNDP Pacific Office Financial Inclusion program to strengthen insurance products for small-medium enterprise. Synergies will be explored with the Insurance Development Forum (IDF) initiative which is a public/private partnership between the insurance industry and development partners (UNDP, OCHA, UNISDR, WB, IFRC and DFID) with the view to accelerate insurance penetration to promote resilience to climate, disaster and environmental risks.

### **Building on UNDP's partnership approach**

The project will be implemented in alignment with UNDP's 5-10-50 partnership initiative. The 5-10-50 partnership initiative supports the implementation of the Sendai framework by providing a comprehensive offer of services to accompany 50 countries graduate towards risk informed development through mutually reinforcing interventions through five interconnected pathways, supported by institutionalized partnerships: Actionable risk information; Integrated Risk Governance; Early Warning and Preparedness; Resilient Recovery and Strengthening local risk management capacities.

The 5-10-50 SIDS window<sup>79</sup> proposes a comprehensive offer of services to accompany selected PICS with specific capacity needs focusing on dissemination of actionable climate information for applications to early warning and risk reduction in key sectors (tourism, land use planning, agriculture, ecosystem management); and Pre-Disaster Preparedness for Recovery to build regional and national institutional arrangements, communication, coordination and planning capacities to ensure timely and resilient recovery, including through strengthening PDNA capacities, and promoting predictable funding instruments for recovery. In this respect, UNDP's Bureau for Policy and Programme Support (BPPS) works to build capacities and provide timely and appropriate technical assistance for post-disaster recovery and preparedness. Through this project UNDP's global resources, tools and methodologies on disaster risk governance, risk information, early warning preparedness, local risk management and recovery will be made available to national agencies, regional organisations and Pacific Humanitarian Team (PHT) members, to assist in their risk informed development efforts.

The 5-10-50 is mobilizing the right partners to bring about catalytic change on the ground by working closely with GFDRR, IFRC, UNISDR, and other UN agencies and leveraging each organization's comparative advantage. Through sustained engagement over a ten year period it provides predictable assistance and support long term change process towards risk informed development. Lastly it promotes a streamlined approach to DRR, climate change adaptation and sustainable development leveraging the full strength of UNDP's work across a variety of areas such as sustainable energy, ecosystem based management and climate change adaptation.

UNDP is well placed to assist the PICs in building their capacity to manage disaster risks. It has a strong presence in the region with offices in Papua New Guinea, Fiji (covering regional programming and 10

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<sup>79</sup> The 5-10-50 programme has three main windows: SIDS, MICS and Fragile and conflict affected countries..

countries including a sub-office in Solomon Islands), Samoa (covering 4 countries) and UNDP field presence through country development managers where there is no UNDP office. .<sup>80</sup> UNDP has significant DRR and CCA, combined as CCDRM, related experience in the Pacific region. Major UNDP programmes being implemented include the Pacific Financial Inclusion Project and the Pacific Risk Resilience Programme (PRRP)<sup>81</sup>.

UNDP's expertise includes: capacity development in weather and climate monitoring capacities, development of early warning systems, disaster risk governance, disaster risk reduction and preparedness, post disaster recovery and climate change adaptation. Support has already been provided to several PICS to strengthen early warning systems (EWS) infrastructure and capabilities. For example, UNDP supported Samoa with the National Climate Early Warning System (CLEWS)<sup>82</sup> – and the PNG UNDP office is presently assisting the PNG government to review the status of early warning systems. UNDP has been providing leadership in the field of disaster recovery for many years, including the drafting of guidelines on Post Disaster Needs Assessment, conducting socioeconomic impact assessment, planning, programming, coordination and capacity building; UNDP has provided rapid response technical assistance to PICs following disaster events. For example, UNDP assisted Vanuatu (2015), Samoa (2012) and Fiji (2012) to undertake a human and social disaster impact assessments following recent disasters, and worked with the Solomon Islands, through PRRP, to build the capacity of the central development planning agency to prepare for, and coordinate, recovery efforts through the Recovery Coordination Committee (RCC). UNDP, through the Pacific Financial Inclusion Programme (PFIP), is already assisting selected PICs to increase community access to market based financing facilities, including private insurance and micro credit facilities. Expanding the PFIP work in relation to post disaster recovery would be a useful link to this project.

#### *UNDP's Comparative Advantage*

- ❖ *UNDP's Mandate* - UNDP has a mandate to support the national sustainable and risk informed development processes in the region for implementation of the SAMOA Pathway. This mandate also provides the rationale for UNDP's efforts to integrate resilient development issues into the wider development objectives of poverty reduction and inclusive economic growth. UNDP is the lead UN agency on early recovery and has inherited responsibilities from the Inter-Agency Standing Committee (IASC), the body responsible for inter-agency cooperation in the humanitarian system. UNDP also chairs the Cluster Working Group on Early Recovery at a global level and in this role it has developed policy guidance on early recovery and recovery programming.
- ❖ *UNDP's network* – Although individual UNDP offices may lack the necessary expertise, Globally UNDP has strong technical advisory teams in climate change adaptation and disaster risk management as well as gender mainstreaming, capacity development and knowledge management, accessible from global to local level. UNDP is able to draw on this network to respond to regional and national needs with advice tailored to the needs of small island countries. The presence of technical expertise at the global level and in the region with support where needed from UNDP Headquarters and UNDP Regional Hub in Bangkok, enables it to serve partners in the Pacific with result-oriented and proven development solutions.
- ❖ *UNDP as coordinator of PDNAs*: UNDP coordinates and represents the UN system in the 2008 Joint declaration on Post Crisis Assessments and Recovery planning. In its role as the coordinator, UNDP has led the drafting of guidelines for all social sectors and cross cutting issues for the post disaster needs assessment and conducted over 40 assessments jointly with the World Bank and the EU. UNDP has developed training materials on PDNA and Recovery Preparedness which has been used and tested in several countries globally.
- ❖ *Working relationship with Donors* – in the Pacific, UNDP convenes an informal forum, meeting 4-5 times a year, for development partners to exchange information on topics related to climate change and disaster management that affect the region.

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<sup>80</sup> UNDP's 15 programme countries in the Pacific include: Cook Islands, Federated States of Micronesia, (FSM), Fiji, Niue, Republic of the Marshall Islands (RMI), Samoa, Tokelau, Tonga, Tuvalu, Vanuatu, Palau, Kiribati, Papua New Guinea, (PNG), Nauru and Solomon Islands.

<sup>81</sup> [http://www.asia-pacific.undp.org/content/dam/rbap/docs/Research%20%26%20Publications/CPR/PC\\_PRRP\\_brochure.pdf](http://www.asia-pacific.undp.org/content/dam/rbap/docs/Research%20%26%20Publications/CPR/PC_PRRP_brochure.pdf)

<sup>82</sup> see <http://www.mnre.gov.ws/index.php/clews>

- ❖ *Working relationship with Governments* – UNDP works with Governments and is usually considered a trusted partner, both in terms of providing technical advice, and accessing and delivering financial resources.
- ❖ *Relationship with global and regional development partners* – At the regional level UNDP has a good working relationship with regional agencies across the Pacific and is viewed as an important partner in terms of coordination and collaboration in the development field. This collaboration allows for resource mobilization, sharing of technical resources and joint programming for the purpose of building capacity to support implementation at the country and community level. Globally, UNDP is expanding its partnership with GFDRR, IFRC, UNISDR, MSB, NORCAP, etc... under the 5-10-50 Partnership Framework for Risk Informed Development to bring about catalytic change on the ground and leveraging each other's comparative advantage and complementarity skills for achieving sustained progress in disaster risk reduction.
- ❖ *Coordination and collaboration with the UN* – UNDP is positioned to share tools and information and access technical support between different UN agencies.
- ❖ *Community focus* – one of the strengths of UNDP is its ability to work both with Governments at the policy and institutional level and with communities and civil society organizations in implementing projects on the ground.
- ❖ *South-South and triangular cooperation* – UNDP, with its network of country offices in more than 170 countries, has the ability to promote South-South cooperation, a priority area in UNDP's Strategic Plan. Thus UNDP is in a unique position to facilitate the sharing of experiences, lessons and best practices in disaster management and climate change between countries.

The 5-10-50 will enable the exchange of experiences and expertise and transfer of technologies between SIDS in the Pacific, the Caribbean and AIMS, in order to identify and replicate suitable and tested solutions, in particular in relation to insurance instruments in the Caribbean.

- ❖ *Knowledge management* – one of the main strengths of UNDP is its ability to leverage the collective knowledge to improve the impact of development work at a regional and country level.

This project will both build on existing organizational strengths as well as allowing for an expansion of this support for more coherent and targeted climate and disaster risk and recovery assistance.

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## V. STRATEGY AND APPROACH

In the arena of climate and disaster risk management, there is great demand due to PICs level of vulnerability and exposure. This project will focus on a few niche areas and countries where Russian assistance can have maximum impact. The approach calls for close partnership with other regional organizations and development partners, to provide the support, technical assistance and results necessary to meet the priority needs of the PICs.

Given the identified gaps, the work of other organizations, and the specific skills, experience and competencies of UNDP, there is a clear rationale for the project to focus on the following areas:

- Strengthening early warning systems and climate monitoring capacity;
- Strengthening preparedness and planning mechanisms and tools to manage disaster recovery process at local, national and regional levels;
- Increasing the use of financial instruments to manage and share disaster-related risks and fund post-disaster recovery efforts.

Through this project, UNDP proposes to effectively address the consequences of, and responses to, climate related natural hazards. This project responds directly to the Outcome 5 of the UNDP Strategic Plan for 2014-2017: *Countries are able to reduce the likelihood of conflict, and lower the risk of natural disasters, including from climate change.*

The project is anchored with the UNDP Global 5-10-50 Partnership Framework for Risk Informed Development. It will directly contribute to pathway 3 - Early Warning and Preparedness: Strengthening preparedness through enhancing disaster early warning and improved climate information, emergency response services and communication at all levels with the view to reduce losses and impact on the most vulnerable and pathway 4 - Resilient Recovery: Institutionalizing capacities to manage effective recovery processes as strategies to reduce risks and promote resilient development, and

At the *programmatic* level the project is anchored with the UNDP programming frameworks for the region. The project is directly linked with the UNDP Regional Programme Document (RPD) for Asia Pacific for 2014-2017, namely, Outcome 3 - *Countries are able to reduce the likelihood of conflict and lower the risk of natural events, including those resulting from climate change*. The project is aligned with the design parameters of the UNDP Strategic Plan 2014-2017 in the following manner: *targeting* – the project targets building regional and national capacity to better plan and integrate risk management into development planning; *issues-based approach* – the project addresses key aspects of climate and disaster risk; *sustainability* – the project seeks out synergies and aims to complement positive movement in the region, strengthening national and regional institutions in efforts to address climate and disaster risk; *ensuring voice and participation* – the project will directly engage regional and national actors in designing the project implementation at the inception phase, and strengthen regional coordination for consistent engagement.

In addition, the project contributes to UNDP Pacific’s Regional Project Document outputs, by ensuring effective institutional, legislative and policy frameworks are in place to enhance the implementation of disaster and climate risk management measures at national and sub-national levels (Output 3.1), as well as ensuring that preparedness systems are in place to address the consequence of natural and man-made hazards at levels of government and community (Output 3.2). The Regional Project Document also reflects the importance of strengthening south-south cooperation (SSC) as a tool for development solutions (Output 4.3). SSC is a process of enabling institutional change that is based on context and demand, and focuses on the development of capacities in one country based on the successes and solutions provided by another. In this project, SSC is envisioned to between countries to share CLEWS experience as well as exchange lessons learned in recovery.

The project outputs are aligned with the Pacific 2013-17 UNDAF, UNDP sub-regional and national programme frameworks, and the following regional strategies:

- The *Pacific Islands Meteorological Strategy (PIMS) 2012 - 2021* sets out the strategic context and direction for strengthening NMSs in the Pacific Islands region, enabling them to provide relevant weather and climate services for informed decision-making. This project is aligned to PIMS priority areas as follows: 1) *improved weather services, in particular aviation, marine and public weather services*; 2) *improved end-to end multi-hazard EWS*; 3) *enhanced infrastructures (data and information services) for weather, climate and water*; and 4) *improved climate services*<sup>83</sup>.
- The *Pacific Islands Framework for Action on Climate Change (PIFACC) 2006-2015* (extended up to 2016) aims to ensure that Pacific Island peoples and communities build their capacity to be resilient to the risks and impacts of climate change. This project embodies three of the six guiding principles stated by PIFACC: improving understanding of climate change; education, training and awareness; and, partnerships and cooperation<sup>84</sup>.
- The *Pacific Disaster Risk Reduction and Disaster Management Framework for Action (RFA) 2005 – 2015*, (extended up to 2016) undertakes to build capacity in PICs communities by accelerating the implementation of DRR/DRM policies, planning and programmes. This project addresses RFA themes like “Knowledge, Information, Public Awareness and education” (theme 2), “Planning for effective Preparedness, Response and Recovery” (theme 4), and “Effective, integrated and people focused EWS” (theme 5)<sup>85</sup>.

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<sup>83</sup><https://www.sprep.org/attachments/Publications/PacificIslandsMeteorologicalStrategy.pdf>, pp.5-8.

<sup>84</sup> The main principles are: 1) implementing adaptation measure, 2) governance and decision making, 3) improving understanding of climate change, 4) education, training and awareness, 5) contributing to global greenhouse gas reduction, 6) partnerships and cooperation. [http://www.sprep.org/climate\\_change/pycc/documents/PIFACC.pdf](http://www.sprep.org/climate_change/pycc/documents/PIFACC.pdf)

<sup>85</sup> RFA identified six themes for action: 1) Governance – Organisational, Institutional, Policy and Decision-making Frameworks , 2) Knowledge, Information, Public Awareness and Education, 3) Analysis and Evaluation of Hazards, Vulnerabilities and Elements at Risk, 4) Planning for effective Preparedness, Response and Recovery, 5) Effective, Integrated and People-Focused Early Warning Systems, 6) Reduction of Underlying Risk Factors. For more information visit: [http://www.preventionweb.net/files/34617\\_mr06131.pdf](http://www.preventionweb.net/files/34617_mr06131.pdf)

The project will apply four inter-related strategies to achieve the results:

- *Capacity Development:* The project will use existing tools and models to strengthen the capacities of regional and national entities in climate early warning, recovery and disaster risk financing. The capacity development component will be conducted through targeted technical assistance, training program development, workshops, forums, and information exchange. The project will ensure technical assistance by including technical advisors in the areas of disaster risk reduction, recovery and climate early warning on the project team. Where national implementation warrants it, national project coordinators will be located in respective Line Ministries to support project activities.
- *Knowledge Management:* The project will apply the UNDP's Knowledge Management strategies to extract and systematize knowledge generated by the project. The project will draw from national experiences to exchange at the regional level to foster south-south cooperation. This may include key lessons, best practices, policy recommendations, capacities and knowledge products such as report, methodological tools and guidelines, and case studies<sup>86</sup>.
- *Communication and advocacy:* The project knowledge products will be disseminated across the region and will constitute building blocks for improved awareness related to climate and disaster risk management and recovery. The UNDP Pacific Office Communication Team will assist with the formulation of the project communications strategy to enhance awareness and engagement on related issues, and provide visibility for Russia and collaborating partners.
- *Monitoring and Learning for Change:* The Project will formulate a Project Monitoring plan, during the inception phase, with clear identification of targets, indicators, benchmarks and responsibilities. The project will engage all stakeholders in the monitoring process; demonstrate achievement of development results at *outcome and output level*; and encourage development of capacities through learning from the experiences, knowledge and best practices generated by the project. An external evaluation will be conducted to evaluate progress towards outcomes.

### **Implementation Strategy**

The implementation of activities in the three output areas will require the engagement of a broad range of stakeholders at the sub-national, national, and regional level. This will entail careful project management and regular consultation with key agencies to ensure that the project integrates with, and complements, other technical assistance initiatives that are already underway in the region. The proposed engagement points and technical assistance activities identified below have been based on comprehensive consultations with the countries and regional agencies as to the present status of climate and disaster risk management related capacities across the PICs. The proposed activities will be validated and further detailed during the project inception phase.

Identifying the countries that will be provided technical assistance in each of the three output areas will also be assessed and finalized during the project inception phase. All PICs will be eligible for support, although available budget resources will influence the number of countries that will receive support under each of the three output categories. Some project activities (for example, PHT post disaster support and knowledge products delivered through the project) will clearly benefit all countries, while other activities (for example, investments in upgrading weather stations and data communication facilities) will be directed at a more limited number of PICs, depending on identified needs and priorities. It is also anticipated that the countries that receive support under each outcome area will vary.

### **Output 1: Strengthened early warning and climate information and communication capacity in selected PICs with a view to reduce losses and impact on the most vulnerable. (5-10-50 Pathway 3)**

Under this output area PIC project partners will be national hydro-meteorological agencies, key Line Ministries and agencies, and community level end-users. An important focus of the project is to build and strengthen CLEWS-related infrastructure and communication networks in selected PICs. The support will contribute to improving national capacities to generate and use climate and weather information to alert communities primarily to longer term climate risks, and secondarily to extreme weather events. It will be achieved through building on appropriate CLEWS technology, infrastructure and skills development for improved climate services targeted at agriculture and/or health sectors<sup>87</sup>. The focus will be on strengthening a minimum of one sector per country, over the three year period, engaging with equal emphasis National Meteorological Services and the Line Ministry. The first year will be dedicated to establishing meteorological data collection, analysis and integration, and climate research, and building institutional engagement and data collection agreements between National Meteorological Services and the selected sector. The second year will focus on capacity development, sector-specific data collection and climate product delivery. The third year will focus on relevant use of this information as per effective dissemination and communication that influences planning and behaviour. The objective is for tailored climate early warning system information to be generated by data collected and analysed in service of the Line Ministry for the purpose of risk-informed policy and programs, which reach and impact the decision-making of the community-end user.

Identified gaps will be addressed in this project by creating institutional agreements and working groups between sectors and meteorology services; embedding project coordinators in each selected sector; and ensuring sustainability agreements as part of project criteria. The project will seek to build on existing climate early warning systems and strengthen a) NMS capacity in climate observation and monitoring capacity, engagement with sectoral CLEWS users, improved climate services to health and/or agriculture, outreach via other modes ie. SMS, familiarization program with health/agriculture community level workers, and clarification of needs through data sharing agreements and working group; b) Agriculture and/or Health capacity to collect and collate sector impact data, collaborate with NMS for data sharing, interpret and apply climate information, finalize climate risk (adaptation) strategy for the sector, incorporate climate risk forecasting into sector plans, tailor climate training materials for training purposes, incorporate SOPs into health/agriculture routines, and increase community outreach.

***Activity Area 1.1: Increased capacity within national and regional meteorological services to generate user-relevant information on climate risks***

Support will be provided to help strengthen and expand existing climate observation/monitoring networks, build data communication/archival/processing competencies, and strengthen the capacity of national weather services to generate weather forecasts and weather alerts in selected PICs. This includes the capacity to operate and maintain these national networks. Indicative activities to achieve this output could include:

- Assess in detail the gaps and weaknesses in the current climate monitoring network;
- Fill key gaps in observation network (coastal locations; upland river catchments) by repair, upgrade or installation of weather station monitoring equipment, such as automatic weather stations
- Ensure equipment and capability is in place for instrument calibration and replacement
- Provide support to expand the number and coverage of upper air observations
- Design, build, document and implement a data quality assurance process and user interface for the climate database.
- Collect and collate meteorological and physical observations based on traditional knowledge
- Strengthen climate data integration and analysis for sector purposes
- Provide training and capacity building to men and women at the national level on best practice data processing and archiving approaches that contribute to improved climate forecasting, and tracking and monitoring emerging climatic risks;
- Implement fully costed maintenance plan and routine site maintenance schedule
- Ensure training for hardware operation and maintenance
- Arrange transfer data from the respective observing networks to Climate Section database for climate services (CLIDE).

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<sup>87</sup> Target sectors include agriculture and health as they constitute sectors critically impacted by changing climatic conditions in the Pacific; are directly related to economies, well-being and livelihoods of the Pacific populations; and have initial investments in CLEWS across various PICS to build upon in a coherent fashion and facilitate knowledge sharing and cooperation.



- Evaluate need and routines for remotely sensed data and/or special data observations to build climate services
- Develop data exchange agreement between Met and Hydrology divisions
- Establish agreements and arrangements to match agriculture and health data with weather and climate events.
- Match sector impacts data with meteorological events and anomalies, to enable risk profiles and where possible included in short term and seasonal forecasts.
- Improve data archiving systems - Document and implement quality assurance procedures for daily data on CliDE
- Develop accessibility to homogenised data for producing climate service products such as anomaly maps.
- Improve analyses of past climate records for specific hazard and impact data, to enable scenarios of changing risk to be developed
- Test currently available climate information through sector targeted climate and improve the focus of sector-applicable climate science
- Improve availability of science effort to developing sector-focused advice.
- Establish sector-NMS working group for regular climate briefings to help tailor gender-sensitive climate products and implement methods to evaluate social and economic benefits.

**Activity Area 1.2:** *Increased capacity of selected PICs to disseminate and use tailored information on climate to relevant end users.*

Support will be provided to strengthen the engagement of NMS with specific sectors (agriculture or health) to ensure that climate services respond to sector needs. Sector capacity to understand climate risk, collect and analyse data to inform tailored climatic products will be a priority. CLEWS information will be shared and refined with sector input, to ensure end-user relevancy and utility. Effective communication and dissemination will be emphasized. Differential development of CLEWS in other countries also opens up potential opportunities for South-South exchange across the Pacific; countries such as Samoa have made CLEWS a key component of the services that National Meteorological Services can provide to relevant sectors. This experience, the process and procedures established, engagement with sector and community actors, tools, and generation of user-relevant information could be of benefit to other Pacific countries seeking to strengthen climate services. The provision of technical assistance, mentoring, trainings, tool development and documentation of lessons learned could contribute to more effective CLEWS implementation in other PICs. Indicative activities to achieve this output could include:

- Develop collaboration with corresponding sector research communities, e.g. Crop Research Division to enable joint development of climate services such as GIS data layers, user-focused analyses, tools and pathways for dissemination.
- Training and capacity building for sectors on CLEWS
- Develop and implement guidelines for public and institutional data accessibility
- Develop and improve sector-specific advisories
- Develop a Guide to climate services for Agriculture and Health booklets
- Provide climate risk awareness into orientation of staff/curriculum
- Establish data collection and sharing protocols between Ministries
- Identify who in each sector needs climate EWS data and analysis
- Develop good practice guidelines for sector level data collection, including the collection of sex-disaggregated data.
- Train sector to provide data and establish climatic patterns
- Ensure sector-based SOPS for climate related risks
- Develop sector management plans that integrate risk forecasting and adaptation
- Strengthen climate services products through communication and Media-training to National Meteorological Services to facilitate end-user understanding of climatic information
- Deliver climate services and information in a format that meets end-users needs, including needs of vulnerable groups.
- Convene national and regional forums to increase sector understanding of climate services, and ensure that the information disseminated is user friendly and targeted at appropriate end users

- Increase climate dialogues with institutionalized groups, such as Farmers Associations and community health
- Raise awareness at community level on climate alerts and appropriate gender-sensitive community responses/actions to reduce hazard risks
- Use web, public seminars and print media to promote and explain climate at community level, targeting vulnerable groups where appropriate.
- Assess impact of information on end user through user surveys; adjust climate services products as needed
- Share CLEWS experience, tools and procedures with other Pacific countries working in similar sectors

**Output 2: Institutionalize capacities to manage effective recovery processes to reduce risks and promote resilient development (5-10-50 pathway 4)**

The project will focus on strengthening PIC capabilities to manage disaster recovery processes at the national and local level and this will include strengthening planning and coordination of recovery operations, building the capacity to conduct post disaster impact assessments, and strengthening the PHT regional post disaster support team and their capacity to respond to PIC requests for assistance.

Under this output area PICs stakeholders will include national planning and development offices, recovery focal agencies, relevant sector ministries, national disaster management offices, local governments in high risk areas, and communities to engage in pre-disaster recovery planning. At a regional level, stakeholders will include regional agencies working in disaster management, all Pacific Humanitarian Team (PHT) members, and UN Country Teams. There will be close collaboration with the UNOCHA office for the Pacific under the leadership of the relevant UN Resident Coordinator as well as with all members of the PHT to build agencies and team capacity for recovery. SPC will be the key regional partner agency given their role in coordinating post-disaster needs assessments. UNDP Asia-Pacific Regional Hub in Bangkok, who has a team of advisors with skills in preparedness for resilient recovery and integrating DRR and climate change adaptation policies and programs, will provide important backstop support. The Recovery Team of BPPS can also provide technical assistance to the project particularly in development of guidelines for planning and implementing recovery, training and capacity building for post disaster needs assessment and recovery preparedness.

**Activity Area 2.1:** *Strengthened capacity of selected PIC governments to establish, coordinate and manage disaster preparedness and post disaster recovery.*

The project will assist selected PICs to develop targeted disaster preparedness and recovery policies and operating procedures. Proposed activities to achieve this output include:

- Assess existing recovery preparedness planning and programming approaches in selected PICs, including gender analysis.
- Identify and support appropriate actions to strengthen recovery preparedness plans and post disaster recovery plans/operations, drawing on best practices/experience from other countries
- Assist governments to develop disaster recovery frameworks that include institutional mandates, allocate roles and responsibilities and dedicated resources, procurement arrangements, facilitate the participation of communities, civil society and vulnerable groups, and establish the responsibility and accountability of relevant actors
- Develop MOUs for data sharing between Ministries
- Support national governments to ensure collection of baseline data in key sectors, disaggregated by sex.
- Establish National and sub-national coordination mechanisms (exchange of technical experts/roles and responsibilities)
- Build capacity to conduct gender sensitive post-disaster assessments (ie. PDNA) and analyze results at a national, sectoral and sub-national level, using sex-disaggregated data.
- Provide training and technical assistance to build national capacity on post disaster planning, programming and coordination approaches, and assist countries to develop specific recovery plans gender mainstreamed and customised to the needs and priorities at the national and sector level in the each country;

- Provide direct technical support to national disaster recovery focal points to help them develop appropriate tools and knowledge products
- Build government capacity to monitor and track implementation of recovery frameworks or plans, which includes gender indicators.
- Identify the role of the private sector in recovery
- Assist governments to formulate appropriate guidelines, regulations and policies that incorporate disaster resilience into recovery efforts
- Assist selected PICs to establish better community consultation mechanisms which can to engage impacted communities and vulnerable groups in identifying post disaster recovery needs and priorities following major disaster events
- Produce relevant knowledge products for dissemination to all PICs that document lessons learnt from past disasters and response efforts and to provide guidance on improved disaster recovery operations and approaches (ie. case study, good practices in recovery planning, Guide to Planning for Recovery)
- Strengthen national capacities for risk management- identifying, assessing, managing monitoring risk and integrating risk management into development planning
- Provide assistance to countries to more accurately assess and recovery needs through post-disaster needs assessment and use it as a basis to develop recovery plans in the aftermath of disasters.

**Activity Area 2.2:** *Enhanced capacity of the Pacific Humanitarian Team to provide recovery support to countries following disaster events*

This activity area is aimed at increasing the number of dedicated skilled human resources that are available to provide support to countries to manage and coordinate post disaster recovery efforts and prepare recovery frameworks. The team will also provide technical assistance for planning for recovery and programming initiatives. Proposed activities to achieve this output include:

- Establish a small team of dedicated project management and technical support officers located at UNDP Pacific Office and other selected PIC locations to provide: support for project activities, rapid response technical support to countries following disasters, and technical assistance to strengthen recovery preparedness at the national level
- Strengthen PHT leadership in recovery through training, workshops, events and information sharing, including training that address gender mainstreaming in recovery.
- Enhance PHT team coordination mechanisms to ensure timely inputs from PHT member agencies to post disaster recovery efforts, and build UN Country Team recovery support (ensuring recovery support becomes a key element of disaster response and contingency plans and UN Development Assistance Frameworks (UNDAF) of UN Country Teams)
- Actively support resource mobilization from donors and other agencies to support national level recovery efforts following disaster events
- Support the PHT to roll out the cluster approach and support countries to conduct inter-agency disaster needs assessments following disasters by identifying value-added roles for relevant agencies
- Support PHT to work with relevant regional actors to ensure the establishment of disaster recovery baselines in respective areas (e.g. FAO (ag), WHO (health)) ILO (livelihoods)
- Collaborate with regional partners to streamline recovery assessment processes (e.g. PDNA) to address Pacific context
- Train regional partners in gender-sensitive recovery assessment methodologies
- Collaborate with humanitarian actors to ensure that initial damage assessments are designed to feed sex-disaggregated data into recovery assessments

**Output 3: Increased use of financial instruments to manage and share disaster related risk and fund post disaster recovery efforts at the national and local level (5-10-50 pathway 4)**

The project will facilitate the uptake and use of financial instruments to better manage disaster risk and reduce the potential economic and social impact of weather related disasters, and to help finance post-disaster recovery efforts. Particular emphasis will be placed on increasing individual, community and private business enterprise disaster insurance coverage, examining feasibility of public sector-specific insurance (such as crop

insurance) and promoting the establishment of national disaster reserve funds. It will also establish a post disaster seed recovery fund to assist with community recovery efforts, in line with recovery priorities, and examine the feasibility of establishing a multi-donor Recovery Trust Fund for the Pacific. This project will respond to the needs of SME by partnering with UNISDR to educate insurance companies on disaster risk, enhance national legal and policy environment for disaster insurance, introducing disaster risk insurance standards, and pilot capacity building in SMEs to write business continuity plans as steps to lay the foundation of ex-ante risk financing.

Key target PIC stakeholders will be Finance and Planning agencies, Line Ministries, businesses and at risk communities. National and regional insurance companies, and private banks and financial institutions, will also be key stakeholders involved in Outcome 3 support activities. UNDP will work in close partnership with UNISDR to ensure activities are aligned with other assistance being provided or planned. UNDP will contract specialist financial, policy and legal expertise where necessary to support the project team and also draw on expertise from the Pacific Financial Inclusion Program.

**Activity Area 3.1:** *Increased uptake of insurance by individuals, communities, enterprises and government agencies.*

UNDP will work with national governments, insurance companies, relevant regional agency programmes and PFIP to facilitate the uptake of private disaster insurance coverage looking at the feasibility, context and insurance market of select PICs. Proposed activities to achieve this output include:

- Complete, in conjunction with other partners, an assessment of key constraints and impediments to private insurance uptake in select PICs, with particular attention given to insurance product types and premium affordability for SMEs
- Conduct awareness raising activities with financial institutions in selected PICs to demonstrate the benefits of insurance cover, especially for small scale private business enterprises or sector-specific needs
- Work with private insurance companies at the national level to identify innovative cost effective insurance policy options that offer cover for specific weather related events and convene public forums to engage vulnerable communities
- Train small to medium business enterprises to develop business continuity plans.
- Identify risk reduction measures that increase the ability of individuals and businesses to gain cost effective coverage (including adherence to building standards and land use zoning guidelines)
- In conjunction with select PIC assess the level of public sector insurance cover for key economic areas and, where gaps exist, collaborate to advance public sector insurance schemes through detail insurance demand study and business plan for sector-specific products

**Activity Area 3.2:** *Increased use of financial instruments to fund post disaster recovery efforts.*

UNDP will assist selected PICs to identify, access and/or establish funding facilities for post disaster recovery, post disaster reserve funds and a UNDP managed post disaster recovery community support fund.

Proposed activities to achieve this output include:

- Support a feasibility study for establishing a national recovery fund in select PICs
- Establish an Recovery Seed Fund to assist community response efforts to restore livelihoods (such as cash for work programs, the provision of planting stock to replace damaged crops, repairing community infrastructure, restoring government functions among others). Allocations from the fund would be guided by government-led recovery plans. UNDP would work through selected local government, NGOs and private sector partners to meet recovery needs.
- Examine the feasibility of using this Recovery Seed Fund to establish a multi-donor standing recovery fund in the region, given high propensity for disaster events.
- Work with national planning and financing ministries to integrate financing for CCDRM in all new projects including those receiving support from overseas development funds and CCDRM sensitive planning

## VI. PREVIOUS INTERVENTIONS

In the Pacific, UNDP has considerable expertise in implementing initiatives with Early Warning Systems and Recovery components; this experience ranges from managing large sub-regional programmes to community based interventions as well as an establishing knowledge platform (Pacific Solutions Exchange) and chairing the 22-member Development Partners for Climate Change. As mentioned before, the intention is to build synergies with the most relevant existing programs and leveraging proven practices to enhance the development outcomes of this project.

One project to highlight is the *Pacific Risk Resilience Programme (PRRP)*. It is concerned with the concept of **risk governance** in the region. This is the integration of Climate Change and Disaster Risk Management (CCDRM) into routine government and community level needs assessment, planning, budgeting, monitoring and evaluation systems and implementation of development activities in participating countries. This concept is **highly relevant** in the region as climate change and disaster risk is broadly recognized as a development issue at regional, national and local levels. Relevance of the programme is increasingly evident when considered through the lens of sustainable development; resilient development and financing; and gender and social inclusion objectives.

PRRP is a five year programme, funded by the Australian Government Department of Foreign Affairs and Trade (DFAT). It is due to complete all activities in July 2018. It is delivered through a partnership between UNDP and Live and Learn Environmental Education (LLEE), and participating countries including Solomon Islands, Vanuatu, Tonga and Fiji. The programme is structured around three end-of-programme outcomes (EOPOs): integration of CCDRM into development at the national level (EOPO 1); CCDRM considerations are integrated into sub-national development (EOPO 2); and internal and external stakeholders apply learning generated by the programme for risk governance (EOPO 3).

### Current UNDP projects with components that address Early Warning Systems and/or Recovery:

PROJECT TITLE	Countries	Total Project Grant Financing <sup>88</sup>	(Approx.) Start date	(Approx.) End date
ICCRIFS - Integration of Climate Change Risk and Resilience into Forestry Management in Samoa	Samoa	\$2,400,000	2011	2015
Enhancing resilience of coastal communities of Samoa to Climate Change	Samoa	\$8,732,351	2011	2015
Strengthening the Resilience of our Islands and our Communities to Climate Change (SRIC -CC)	Cook Islands	\$4,991,000	2012	2015
SWoCK: Enhancing Resilience of Communities in Solomon Islands to Adverse Effects of Climate Change in Agriculture and Food Security	Solomon Islands	\$5,100,000	2011	2015
Enhancing Adaptive capacity of communities to climate change-related floods in the North Coast and island region of Papua New Guinea	PNG	\$6,530,373	2012	2016
Pacific Risk Resilience Programme	Fiji, Solomon Islands, Tonga and Vanuatu	\$13,114,754	2012	2016
Effective and Responsive Island Level Governance to secure and diversify Climate Resilient Marine Based Coastal Livelihoods and Enhance Climate Hazard Response	Tuvalu	\$4,200,000	2014	2017

<sup>88</sup> Only a portion of each project is directly related to Climate Early Warning Systems, Preparedness and Recovery

Adaptation to Climate Change in the Coastal Zone on Vanuatu (NAPA-2)	Vanuatu	\$8,030,000	2014	2017
Solomon Islands Ministry of Environment, Climate Change, Disaster Management and Meteorology Capacity Development Project (SIMCAP)	Solomon Islands	\$1,200,000	2014	2018
Ridge to Reef: Implementing a Ridge to Reef approach to Preserve Ecosystem Services, Sequester Carbon, Improve Climate Resilience and Sustain Livelihoods in Fiji.	Fiji	\$7,390,000	2015	2018
Ridge to Reef: Economy-wide integration of CC Adaptation and DRM/DRR to reduce climate vulnerability of communities	Samoa	\$13,650,000	2014	2019
Enhancing national food security in the context of global climate change	Kiribati	\$4,425,455	2015	2020
Pacific Solutions Exchange	Regional	\$256,000	2011	ongoing
<b>TOTAL</b>		<b>\$80,019,933</b>		

UNDP has direct Post Disaster Support Assistance in the Pacific experience in these recent disaster events:

- Fiji – *severe floods in 2010* – agricultural reactivation and risk reduction programme
- Fiji – *severe floods in 2012* – cash-for-work programme targeting women market vendors, jointly with ILO and UNWomen
- Fiji – *Cyclone Evan 2013* – part of core team for Post-Disaster Needs Assessment (PDNA)
- Fiji – Cyclone Winston 2016 – part of core team for Post-Disaster Needs Assessment (PDNA)
- Tonga and Samoa – *tsunami in 2009* – recovery framework and resource mobilization, cash-for-work programme in Niuaupolu
- Samoa – *Cyclone Evan 2013* - part of core team for Post-Disaster Needs Assessment (PDNA)
- Cook Islands – *Cyclone Pat in 2011* – fully costed recovery framework developed
- Tuvalu – *severe drought in 2012* – facilitated desalination units for drinking water
- RMI – *drought in 2013* – recovery programme framework developed, and supported a programme for drought resistant crops
- Tonga – *Cyclone Ian in 2013* – cash-for-work programme in Ha’apai, in partnership with Digicel, and international debris management expert
- Palau – *Typhoon Bopha in 2012* – expert provided for design of recovery framework design
- Palau – *Typhoon Haiyan in 2013* – designed a cash-for-work programme for the government
- Solomon Islands – *severe floods 2014* – recovery planning support

UNDP can access resources from the global programme including core funds up to USD\$100,000 when a disaster strikes. These funds will be mobilized in support of countries impacted by disasters, in support of recovery efforts. UNDP can also access a team of technical experts through the Surge mechanism and consultants through the Express Roster for supporting the post disaster recovery.

### Complementarity with Existing Projects

In addition to outlining complementarity and synergies with UNDP PRRP (as outlined in the previous section), SPC PDNA work, SPREP and WMO CLEWS support and OCHA-led PHT, this project will complement and extend some of the work that is coming to an end with the Climate and Oceans Support Program in the Pacific (COSPPac), the Finnish-Pacific project (FINPAC), and the Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI).

The **Climate and Oceans Support Program in the Pacific (COSPPac)**, started in 2012, is a four-year programme to enhance the capacity of Pacific Islands to manage and mitigate the impacts of climate variability and tidal events. The budget is US\$32,000,000. Efforts with regional stakeholders are in place to create tools that can forecast and report on climate, tides and the ocean, producing valuable services to the communities. The Programme considers effective communication of information to communities, businesses and Governments a relevant issue to address<sup>89</sup>. The programme has some similar interests with the proposed project, including generating user-relevant information on climate risks.

The **Finnish-Pacific Project (FINPAC)** is a four-year regional multilateral project, coordinated through the Secretariat of the Pacific Regional Environment Programme (SPREP) with a range of partners, aims to improve livelihoods of Pacific island communities by delivering effective weather, climate and early warning services. The budget is Euro\$3,700,000. The two components of the project aim to improve weather and climate forecasts and warnings by National Meteorological Services (NMSs) and improve ability of the NMSs to respond to the needs of villages with regard to hazardous weather and climate change. The target beneficiaries of the project are the National Meteorological Services (NMSs) and selected Pacific communities<sup>90</sup>.

Early warning is a major interest also of the World Bank **Pacific Resilience Program (PREP)** a regional program whose objective is to strengthen early warning, risk reduction and resilient planning and financial protection capacity of participating countries. Participants for Phase I are Samoa and Tonga; Vanuatu and the Republic of Marshall Islands (RMI) will receive regional technical assistance. Pacific Islands Forum Secretariat (PIFS) will implement the project and the Secretariat of the Pacific Community (SPC) will provide technical assistance. The budget is US\$40,100,000. Beneficiaries include vulnerable communities, government agencies in charge of disaster and climate resilient planning and response, resilient investments and disaster risk financing, and regional organizations. The program has four components: 1) Strengthening Early Warning and Preparedness, 2) Mainstreaming Risk Reduction and Resilient Investments, 3) Disaster Risk Financing, and 4) Project and Program Management<sup>91</sup>. A relevant component is the Disaster Risk Financing, which could be leveraged for synergies.

Providing financing tools for CCDRM is a major focus of the **Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI)**, a joint initiative of the World Bank, SPC, and the Asian Development Bank with financial support from the Government of Japan, the Global Facility for Disaster Reduction and Recovery (GFDRR) and the European Union. Launched in 2007, it aims to provide PICs with disaster risk assessment and financing tools for enhanced CCDRM, including the development of the PCRAFI insurance pool. PCRAFI includes the **Pacific Disaster Risk Financing and Insurance (DRFI)**, a joint initiative by the World Bank, the Secretariat of the Pacific Community (SPC/SOPAC) and their partners, with grant funding from the Government of Japan that builds on two main components: 1) technical assistance and capacity building on public financial management of natural disasters; and 2) pilot implementation of market-based sovereign catastrophe risk insurance solutions. Synergies with this initiative will be further explored.

JICA is currently supporting early warning in Fiji, through the **Project for the Rehabilitation of the Medium Wave Radio Transmission in Fiji**. The project installed antennae/transmission tower, for 9 isolated atoll islands with limited connectivity, in order to facilitate communication and access to early warning. This US\$7,000,000 project began in August 2015 and will finalize at the end of 2017. JICA's efforts in DRM in the Pacific also include the **Project for Improvement of Equipment for DRM**, with a focus on meteorological monitoring in the region. The project, managed in coordination with Fiji Regional Specialized Meteorological Services, includes strengthening tide observation, lightening detection, wind profile system, AWS, and calibration equipment. Meteorological functions of the Pacific region are the main focus of the **Project for Strengthening Project in CBDRM in the Pacific Region** which focused on improving flood monitoring systems in Fiji and Solomon Islands. The **Project on Reinforcing Meteorological Functions**, aims to strengthen RMSC capacity development for meteorologists. The initiative accepts trainees from nine SIDS countries (Fiji, Samoa, Tonga, Tuvalu, Vanuatu, Niue, Nauru, Solomon Islands, Kiribati, and Cook Islands) for strengthening meteorological capacity, monitoring and calibration. Receiving reports on the

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<sup>89</sup> <http://cosppac.bom.gov.au/>

<sup>90</sup> FINPAC, Community Climate and Disaster Resilience Planning Workshop Report 2015.

<sup>91</sup> PREP, Regional Environmental And Social Management Framework (REMF).

project activities and results would be extremely beneficial to this initiative, to avoid duplication of efforts and look for possible synergies.

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## VII. KEY PARTNERS AND THEIR EXPECTED ROLES

Within PIC Governments target partner agencies will include national planning offices, national meteorological services, selected line ministries, and where applicable, national disaster management offices. Other partner agencies will include the Secretariat of the Pacific (SPC) Geoscience Division, Secretariat of the Pacific Regional Environmental Program (SPREP), University of the South Pacific, Pacific Meteorology Council, PHT members and UN Agencies. Prospective Russian partner agencies include the National Emergency Management Centre (EMERCOM) and the Russian Federation Service for Hydrometeorology and Environmental Monitoring (ROSHYDROMET).

### Key Regional Partner Agencies

The **Secretariat of the Pacific Regional Environment Programme (SPREP)** has been charged by the governments and administrations of the Pacific region with the protection and sustainable development of the region's environment. SPREP is the region's inter-governmental organisation for environment and sustainable development, and is one of several inter-governmental agencies comprising the Council of Regional Organisations in the Pacific (CROP). It achieved autonomy as an independent inter-governmental organisation with the signing of the Agreement Establishing SPREP in Apia on 16 June 1993. Under the Agreement, the purposes of SPREP are to promote co-operation in the South Pacific Region and to provide assistance in order to protect and improve the environment and to ensure sustainable development for present and future generations (Art.2). Its vision is "The Pacific environment, sustaining our livelihoods and natural heritage in harmony with our cultures". It is made up of 26 PICTS. SPREP's activities are guided by its Strategic Action Plan 2011-2015. Develop through extensive consultation with Members, Secretariat programme staff and partner organisations; the Plan establishes four strategic priorities: climate change; biodiversity and ecosystems management; waste management and pollution control; and environmental monitoring and governance.

The **Secretariat of the Pacific Community (SPC)** is a regional intergovernmental organisation whose membership includes both nations and territories in the Pacific Ocean. SPC's mission is to "help Pacific Island people position themselves to respond effectively to the challenges they face and make informed decisions about their future and the future they want to leave for the generations that follow". SPC today is the oldest and largest organization in the Council of Regional Organisations in the Pacific (CROP). SPC concentrates on providing technical, advisory, and statistical and information support to its member governments and administrations, particularly in areas where small island states lack scale or capacity or in areas where regional co-operation or interaction is necessary. SPC's development assistance and technical programmes are co-ordinated under the Programmes Directorate, comprising seven divisions: Economic Development, Fisheries, Aquaculture and Marine Ecosystems, Geoscience, Land Resources, Public Health, Social Development, Statistics for Development. The Geoscience Division applies geoscience and technology to realise new opportunities for improving Pacific livelihoods, and includes three technical work programs: oceans and islands, water and sanitation, and disaster reduction.

The **Pacific Meteorological Council (PMC)** is a specialized subsidiary body of the SPREP established to facilitate and coordinate the scientific and technical program and activities of the Regional Meteorological Services. The PMC provides policy relevant advice the SPREP on the needs and priorities of its member countries and territories in regards to weather and climate.

The **Council of Regional Organization in the Pacific (CROP)** brings together regional organizations to pursue collective aims of achieving sustainable development in the Pacific Island Countries and Territories. The agencies include SPC, SPREP, the Pacific Islands Development Program (PIDP), the South Pacific Travel Organisation (SPTO), University of the South Pacific (USP), the Pacific Aviation Safety Organisation, and the Pacific Power Association; the Pacific Islands Forum Secretariat, a grouping which aims to advances Pacific political agendas, chairs the Council. CROP provides the vehicle for the formulation and dissemination of the regional Strategy on Development Priorities, which informs regional development priorities. CROP



members undertake to work together in addressing the constraints and problems of island development and providing necessary services.

## **UN Agencies**

The Pacific Humanitarian Team (PHT) is a group established by the **United Nations Office for the Coordination of Humanitarian Affairs (OCHA)** in 2008 to facilitate regional entities working together to facilitate wide collaboration in emergency preparedness and response in the Pacific. The PHT was established to foster regional partnerships and thereby improve regional humanitarian response capacity. It is a coordination mechanism open to all humanitarian organizations that undertake humanitarian action<sup>15</sup> in the region and that commit to participate in coordination arrangements. The PHT consists of UN agencies, the Red Cross movement, regional and bilateral organizations, national and international non-governmental organization, faith-based and community based organizations, and donor partners. OCHA Regional Office for the Pacific (ROP) acts as the Secretariat of the PHT, and manages it, in coordination with United Nations Resident Coordinators in the Pacific, based in Fiji and Samoa.

The World Meteorological Organization (WMO) is a specialized agency of the United Nations. It is the UN system's authoritative voice on the state and behaviour of the Earth's atmosphere, its interaction with the oceans, the climate it produces and the resulting distribution of water resources. Established in 1950, WMO became the specialized agency of the United Nations in 1951 for meteorology (weather and climate), operational hydrology and related geophysical sciences. As weather, climate and the water cycle know no national boundaries, international cooperation at a global scale is essential for the development of meteorology and operational hydrology as well as to reap the benefits from their application. WMO provides the framework for such international cooperation. The **World Meteorology Organization (WMO) Regional Office for Asia and the South-West Pacific** is part of the Development and Regional Activities Department. It assists the members of Regional Association V (South-west Pacific) in capacity building through regional technical conferences, seminars and workshops to strengthen skills and expert knowledge of NMHS; awareness, creation and promotion of activities of NMHSs and WMO through technical experts of the Secretariat; advisory services to Member states; technical cooperation project development, resource mobilization and implementation; and emergency response and assistance.

The **United Nations Office for Disaster Risk Reduction (UNISDR)** is part of the United Nations Secretariat and serves as the focal point in the United Nations system to ensure coordination and synergies among disaster risk reduction activities of the United Nations system and regional organizations and activities in socio-economic and humanitarian fields. **UNISDR Regional Office for Asia-Pacific** supports on-going disaster risk reducing actions of people, governments, United Nations Country Teams, regional and international organizations, and the many stakeholders exposed to various hazards and risks.

## **Role of Russia**

The project will also provide an opportunity to draw on Russian expertise, specifically through the National Emergency Management Centre (EMERCOM) and the Russian Federation Service for Hydrometeorology and Environmental Monitoring (ROSHYDROMET). EMERCOM has served as a humanitarian agency supporting countries during disaster situations (e.g. Zimbabwe and Laos) and ROSHHYDROMET is involved in providing services in hydrometeorology and related fields, as well as environmental geophysical monitoring.

The project will organize at least two knowledge exchange tours for experts from the Russian Federation (4-5 people per tour) to attend project events in the Pacific region. The knowledge exchange tours will aim to include Russian experts in meteorology, preparedness and recovery, disaster financings and other relevant areas in project planning events (at inception phase), trainings (at implementation phase) or results assessment events. The knowledge exchange will provide substantive input in project delivery and sustainability through facilitation of cooperation between Russia's and Pacific countries' experts.

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## **VIII. GENDER EQUALITY AND MAINSTREAMING**

It is recognized that gender inclusion and analysis are critical components in ensuring that policy and programming uphold gender equality as well as ensuring equitable consideration to the differing needs of men,

children, youth, girls, boys and those with special needs. The project will embrace *gender mainstreaming* in alignment with UNDP political and strategic documents, namely: the *UNDP Global Gender Strategy*, *Gender Parity Strategy for 2013-2017* and the *8-point Agenda for Women's Empowerment and Gender Equality in Crisis Prevention and Recovery*.

Outputs assume that gender will be mainstreamed through: 1) inclusion of women at all levels of project decision-making, implementation and monitoring 2) inclusion of gender analysis as an input to regional/national policy and programming, where appropriate 3) building capacity of regional and national partners to understand and reflect the differing needs of women, men, girls and boys at a policy and programming level, and 4) establishment of gender targets and indicators as key component of project design and monitoring, in the inception stage..

More specifically, the project will focus on a) strengthening gender analysis in sector climate early warning systems b) highlight gender perspective into met/climate services training and capacity development programming, where appropriate c) the inclusion of collection and analysis of sex-disaggregated data for post-disaster recovery processes d) ensuring national-level situation analysis and design of recovery plans take gender into account.

- *The project will support the use of gender indicators to monitor, and evaluate gender mainstreaming and will ensure, where relevant, that data is disaggregated by gender.* During the project inception period, one objective will be strengthen gender-indicators and identify specific activities and targets that further gender integration.
- The project will *contribute to building national and regional gender mainstreaming capacities* to analyze and integrate gender-sensitive data into disaster recovery capacity building, policy and planning. The project will advocate for application of sex-disaggregated data in recovery planning and processes.
- In the climate early warning area, *the project will promote a gender sensitive capacity development strategy*, ensuring equitable participation of men and women. In addition, the project will use sex-disaggregated data where feasible to generate analysis and cross-referencing of climate and sector data, in order that sector planning is informed by gender-differentiate impacts of climate related risk.
- It is well-recognized that climate and weather information needs to be shaped in a way to reach women and vulnerable groups. Building on the recommendation of the WMO Conference on the Gender Dimensions of Weather and Climate Services<sup>92</sup>, the project aims to *improve the understanding of gender-specific needs in the provision, access and use of weather and climate services* for resilience, including through collection of gender-disaggregated data. Weather and climate information services allow individuals and organizations working in weather-sensitive sectors, such as agriculture and health, to improve decision making. Women and men need to be able to produce, acquire and use weather and climate service information in order to make informed decisions about their livelihoods and well-being. It is generally acknowledged that women have less access to climate and weather information than what is needed, and specific effort must be made to provide the required education, technologies and tools to support women's engagement in climate services.
- *The project will prepare quarterly progress reports and results, which monitor the gender mainstreaming efforts* upon completion of the inception period.

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## **IX. PROJECT SUSTAINABILITY**

Providing sustainability to the proposed investments will be a criteria for national participation in the project. During the inception phase, national and regional stakeholders will begin to identify how the project outcomes can be achieved in a sustainable manner. By the end of 2017 the project will propose a detailed Project Sustainability and Exit Strategy for the approval of the key national and regional stakeholders. The strategy

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<sup>92</sup> <http://www.wmo.int/genderconference/documents>

will be based on the gap analysis, consultations conducted, and will contain the following essential sustainability considerations:

- At the *regional* level, the project will propose sustainability actions and funding priorities to regional agencies and, if appropriate, member governments and other donors and discuss the possibilities of next steps beyond the life of the project in support of enhance climate and disaster-resilience development.
- At the *national level*, the project will strengthen the capacities of public sectors by providing the stakeholders and beneficiaries with climate early warning, recovery and risk-financing tools and mechanisms for improved disaster and climate risk resilience and coordination and integration of CCDRM, as well as a plan for more effective climate services. Each participating national Ministry and sector must identify how the project outputs will be institutionalized, maintained and resourced.
- The project will build the buy-in of national governments by engaging the stakeholders in the articulation, implementation and monitoring of climate risk and recovery management. The project will strengthen existing coordination mechanisms supporting stronger links and partnerships between national and regional institutions and civil society that can sustain beyond the life of the project.
- Knowledge generated by the project will be applied for the further strengthening of national and regional capacities to provide effective climate services and recovery, and enhancing the advocacy for mainstreaming of risk management for climate and disaster-resilient development planning, policies and programs.

## X. RESULTS AND RESOURCES FRAMEWORK

**Applicable Key Result Area from UNDP Strategic Plan:** Outcome 5 : Countries are able to reduce the likelihood of conflict and lower the risk of natural disasters, including from climate change

**RBAP Regional Program Document Outcome:** Outcome 3. Countries are able to reduce the likelihood of conflict, and lower the risks of natural disasters, including from climate change

**Corresponding Outputs as stated in the UNDP Pacific Regional Project Document:**

Output 3.1: Effective institutional, legislative and policy frameworks in place to enhance the implementation of disaster and climate risk management measures at national and sub-national levels;  
Output 3.2. Preparedness systems in place to effectively address the consequences of and response to natural hazards (geo-physical and climate related) and man-made crisis at all levels of government and community.

**Partnership Strategy:** SPC, SPREP, WMO, UNISDR, OCHA

**Project title and ID (ATLAS Award ID):** Climate Early Warning and Recovery in the Pacific

INTENDED OUTPUTS	OUTPUT TARGETS	INDICATIVE ACTIVITIES	Indicative RESPONSIBLE PARTIES	INPUTS
<p><b>Output 1: Strengthened early warning and climate information and communication capacity in selected PICs with a view to reduce losses and impact on the most vulnerable. (5-10-50 Pathway 3)</b></p> <p>Baseline:</p> <ul style="list-style-type: none"> <li>- Satisfactory climate observation and network coverage exists but not complete in all countries</li> <li>- CLEWS have been piloted in some countries in agriculture, health,</li> </ul>	<p><b>Target (Year 1)</b></p> <ul style="list-style-type: none"> <li>• 2 Sector CLEWs trainings conducted</li> <li>• 2 data sharing agreements signed</li> <li>• 2 Sector-NMS workshop groups established</li> <li>• 1 National climate outlook forum conducted</li> <li>• Communication and media training provided to NMS</li> <li>• 1 Knowledge exchange tour</li> </ul> <p><b>Target (year 2):</b></p> <ul style="list-style-type: none"> <li>• 2 Climate Observation and networks enhanced</li> <li>• 2 data integration systems enhanced</li> </ul>	<p>AR 1.1 Increased capacity within national and regional meteorological services to generate user-relevant information on climate risks</p> <p>Indicative Activities:</p> <ul style="list-style-type: none"> <li>• Assess gaps and weaknesses in the current climate monitoring network and fill gaps with repair, upgrade or installation of weather stations</li> <li>• Design, build, document and implement a data quality assurance process and user interface for the climate database.</li> <li>• Collect and collate meteorological and physical observations</li> <li>• Provide training and capacity building to men and women at the national level to improve climate forecasting, and tracking and monitoring emerging climatic risks</li> <li>• Implement maintenance plan and training</li> </ul>	<p>National Meteorological Services, Health and/or Agriculture Sectors in selected PICs, WMO, SPREP, UNDP</p>	<p>25700 - Workshop; Training 350,000 61100 - Staff 266,765 61300 - Service contractors 400,000 71200 – Intl Consult 220,000 71300 - Local Consult 120,000 71600 - Travel 150,000 72800 – ITC Equip 400,000 72200 – Equipment and Machinery – 750,000 72300 – Goods and Materials – 300,000 73100 – Rental/Premises 110,000 74200 – AV/Publications 60,000 74500 – Misc 40,000</p> <p>Subtotal Output 1: 3,166,765</p>

<p>water and forestry sectors<sup>93</sup></p> <ul style="list-style-type: none"> <li>- Limited data sharing agreements</li> <li>- No sector-NMS working groups</li> <li>- Poor sector ownership of climate services</li> <li>- Weak user-impact and communications</li> <li>- No user-evaluations</li> </ul> <p>Indicators:</p> <ul style="list-style-type: none"> <li># of data sharing agreements</li> <li># of NMS-sector working groups</li> <li># of climate early warning products produced</li> <li># of sector plans that explicitly address climate risk</li> <li># of sector specialists trained in CLEWS</li> <li># of community dialogues</li> <li># of sectors and communities implementing gender-sensitive risk reduction measures</li> </ul>	<ul style="list-style-type: none"> <li>• Guide to climate services produced for agriculture/health</li> <li>• Guidelines on sector level data collection produced</li> <li>• Sector data correlated with climate data</li> <li>• Regional Outlook forum supported</li> <li>• 2 Sector plans integrate climate risk</li> </ul> <p><b>Target (Year 3)</b></p> <ul style="list-style-type: none"> <li>• Sector specific climate products disseminated and shared</li> <li>• 2 targeted community level dialogues</li> <li>• Minimum 2 sectors and communities per country implementing gender-sensitive risk reduction measures</li> <li>• Minimum 2 sector based SOPs for climate related risks operational</li> <li>• National climate outlook forum conducted</li> <li>• User evaluation conducted</li> <li>• One lesson learned forum</li> </ul>	<ul style="list-style-type: none"> <li>• Transfer, analyze and archive data from observing networks to CLiDE database</li> <li>• Establish sector-NMS working group for regular climate briefings to help tailor gender-sensitive climate products and implement methods to evaluate social and economic benefits</li> <li>• Establish data sharing agreements and arrangements to match agriculture and health data with weather and climate events.</li> <li>• Match and correlate climate data and sector for integrated risk analysis</li> <li>• Produce and test sector-applicable climate service products</li> <li>• Climate early warning technical assistance provided to national and regional actors</li> </ul> <p>AR1.2 Increased capacity of selected PICs to disseminate and use tailored information on climate to relevant end users.</p> <p>Indicative Activities:</p> <ul style="list-style-type: none"> <li>• Develop collaboration with corresponding sector research divisions to enable joint development of climate services.</li> <li>• CLEWS training and capacity building for sectors for climate literacy, data collection and public outreach</li> <li>• Develop sector management plans that integrate risk forecasting and adaptation</li> <li>• Conduct communication and media training for NMS and sector</li> </ul>		
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<sup>93</sup> Cook Islands, Solomon Islands, Fiji and Samoa

		<ul style="list-style-type: none"> <li>• Produce climate services in a format that meets end-users needs, including those of vulnerable groups.</li> <li>• Convene national and regional forums to increase sector understanding of climate services</li> <li>• Conduct climate dialogues with community groups</li> <li>• Communities implementing gender-sensitive climate risk reduction measures</li> <li>• Assess impact of information on end user through user surveys; adjust climate services products as needed</li> <li>• Share CLEWS experience, tools and procedures with other Pacific countries working in similar sectors</li> <li>• Knowledge exchange tour with Russian partners</li> <li>• Climate early warning technical assistance provided to national and regional actors</li> </ul>		
<i>Subtotal Output 1</i>				<i>3,166,765</i>
<p><b>Output 2: Institutionalize capacities to manage effective recovery processes to reduce risks and promote resilient development (5-10-50 pathway 4)</b></p> <p><u>Baseline:</u></p> <ul style="list-style-type: none"> <li>- Limited ownership of recovery coordination and process by national governments</li> </ul>	<p><b>Targets (year 1)</b></p> <ul style="list-style-type: none"> <li>• 2 assessments of post-disaster planning and programming approaches</li> <li>• 2 recovery events with PHT</li> <li>• 3 National Trainings on Recovery processes</li> <li>• 3 Historical Loss and Damage Data bases supported</li> <li>• 2 national meetings to establish recovery policy, structure and processes</li> <li>• Agreement on PDNA coordination/roles with PHT members</li> </ul>	<p>AR 2.1 Strengthen capacity of selected PIC government to establish, coordinate and manage disaster preparedness and post disaster recovery</p> <p>Indicative Activities:</p> <ul style="list-style-type: none"> <li>• Assess existing post disaster planning and programming approaches in selected PICs, including gender analysis.</li> <li>• Provide training and technical assistance to governments and sectors to develop recovery frameworks</li> <li>• Support national governments to ensure collection of baseline data in key sectors</li> </ul>	<p>Central Planning Offices, Line Ministries and NDMOs in selected PICs, UNDP, SPC, OCHA</p>	<p>25700 - Workshop; Training 200,000 61100 - Staff 266,765 61300 - Service contractors 115,000 71200 – Intl Consult 150,000 71300 - Local Consult 80,000 71600 - Travel 105,000 72800 – ITC Equip 20,000 72500 – Office Supplies 10,000 73100 – Rental/Premises 100,000 74200 – AV/Publications 85,000 74500 – Misc 10,000</p> <p>Subtotal Output 2: 1,146,765</p>

<ul style="list-style-type: none"> <li>- Limited technical capacity to undertake recovery assessments</li> <li>- Lack of pre-disaster recovery policies, structures and processes</li> <li>- Poor coordination of regional actors</li> <li>- Limited integration of recovery in humanitarian phase</li> </ul> <p><u>Indicators:</u>  # of gender-sensitive pre-disaster recovery plans  # of national and regional actors capacitated in recovery assessments, including gender issues  # of post-disaster needs assessments conducted  # of recovery assessments conducted, including gender analysis  # of recovery monitoring tools developed and in use.</p>	<p><b>Target (year 2)</b></p> <ul style="list-style-type: none"> <li>• 2 Recovery events with PHT</li> <li>• 1 Regional PDNA training for PHT</li> <li>• 2 PDNA Trainings at National Level</li> <li>• 2 Baseline data set strengthened in selected PICs</li> <li>• 2 National-subnational recovery mechanisms established</li> <li>• 3 UN Agencies with baseline data to support national recovery processes</li> <li>• Recovery assessment tools streamlines to the Pacific context</li> </ul> <p><b>Targets (year 3)</b></p> <ul style="list-style-type: none"> <li>• 1 Recovery Events with PHT</li> <li>• 3 countries using tools for recovery monitoring/implementation</li> <li>• 3 countries with community consultation mechanisms</li> <li>• Initial Damage Assessment tool modified to support PDNA, and available</li> <li>• 3 case studies on recovery</li> <li>• Knowledge exchange tour</li> </ul>	<ul style="list-style-type: none"> <li>• Build government capacity to monitor and track implementation of recovery frameworks or plans, using sex disaggregated data.</li> <li>• Establish National and sub-national coordination mechanisms</li> <li>• Assist selected PICs to establish community consultation mechanisms to engage impacted communities in identifying post disaster recovery needs for major disaster events</li> <li>• Document lessons learnt from disasters recovery efforts and to provide guidance on improved disaster recovery operations and approaches</li> <li>• Build capacity to conduct post-disaster assessments (ie. PDNA) and analyse results at a national, sectoral and sub-national level, using sex-disaggregated data.</li> <li>• Technical assistance in recovery provided to national and sub-national governments</li> <li>• Knowledge exchange tour with Russian partners</li> </ul> <p>AR2.2. Enhanced capacity of the Pacific Humanitarian Team to provide recovery support to countries following disaster events</p> <p>Actions:</p> <ul style="list-style-type: none"> <li>• Strengthen leadership in disaster recovery through regional training, workshops, events and information sharing on recovery, including gender mainstreaming in recovery.</li> <li>• Enhance team coordination mechanisms for post disaster recovery efforts;</li> <li>• Build UN Country Team recovery support to integrate recovery in disaster response and UNDAFs,</li> </ul>		
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		<p>including gender mainstreaming in recovery.</p> <ul style="list-style-type: none"> <li>• Support resource mobilization from donors to support national level recovery efforts</li> <li>• Identify value-added roles for relevant agencies in recovery</li> <li>• Support countries to conduct inter-agency disaster needs assessments</li> <li>• Work with relevant regional actors to establish of pre-disaster recovery baselines in respective areas</li> <li>• Collaborate with regional partners to streamline recovery assessment processes (ie. PDNA) to address Pacific context</li> <li>• Train regional partners in gender sensitive recovery assessment methodologies</li> <li>• Collaborate with humanitarian actors to ensure that initial damage assessments are designed to feed data into recovery assessments</li> <li>• Technical assistance in recovery provided to regional partners and regional coordination mechanisms</li> </ul>		
<i>Subtotal output 2</i>				<i>1,146,765</i>



<p><b>Output 3: Increased use of financial instruments to manage and share disaster related risk and fund post disaster recovery efforts at the national and local level (5-10-50 pathway 4)</b></p> <p><u>Baseline:</u></p> <ul style="list-style-type: none"> <li>- Few national recovery reserve funds</li> <li>- No public sectors-specific insurance schemes</li> <li>- No small enterprise private disaster insurance products</li> <li>- Limited financial sector expertise</li> <li>- Limited recovery funding available for post-disaster communities</li> </ul> <p><u>Indicators:</u></p> <ul style="list-style-type: none"> <li># of SMEs with business continuity plans</li> <li># of disaster risk products being developed</li> <li># of recovery projects implemented</li> <li># of individuals and institutions trained in disaster risk financing</li> </ul>	<p>Targets (Year 1)</p> <ul style="list-style-type: none"> <li>• 1 Assessment of constraints to private insurance uptake</li> <li>• 1 Assessment of public sector insurance cover</li> <li>• 2 awareness sessions for financial institutions</li> <li>• Recovery Fund Guidelines produced</li> <li>• Recovery Fund operational</li> </ul> <p><b>Targets (Year 2)</b></p> <ul style="list-style-type: none"> <li>• Feasibility study of multi-donor recovery trust fund</li> <li>• 2 awareness sessions for financial institutions</li> <li>• 3 Recovery projects under implementation</li> <li>• 1 detailed insurance demand study for specific sector</li> <li>• Minimum of 5 SMEs with business continuity plans.</li> </ul> <p><b>Target (Year 3)</b></p> <ul style="list-style-type: none"> <li>• SME and sector-specific disaster risk products identified and developed.</li> <li>• 3 Recovery projects under implementation</li> <li>• Pacific recovery case studies</li> </ul>	<p>AR 3.1 Increased uptake of insurance by individuals, communities, enterprises and government agencies</p> <p>Actions:</p> <ul style="list-style-type: none"> <li>• Assess key constraints and impediments to private insurance uptake in select PICs review of policies and legal provisions on disaster insurance and other risk-sharing mechanisms</li> <li>• Conduct awareness raising activities with financial institutions in selected PICs to demonstrate the benefits of insurance cover</li> <li>• Identify innovative cost effective insurance policy options that offer cover for specific weather related events</li> <li>• Convene public forums to engage vulnerable communities</li> <li>• Train small to medium business enterprises to develop business continuity plans</li> <li>• Identify risk reduction measures that increase the ability of individuals and businesses to gain cost effective coverage</li> <li>• Assess the level of public sector insurance cover for key economic areas</li> <li>• Conduct detail insurance demand study and business plan for sector-specific products to support sector-specific risk financing</li> <li>• Technical assistance provided to support partnerships in disaster finance</li> </ul> <p>AR 3.2 Increased use of financial instruments to fund post disaster recovery efforts</p> <p>Actions:</p>	<p>UNISDR, Selected PICs, UNDP</p>	<p>25700 - Workshop; Training 90,000  61100 - Staff 266,765  71200 – Intl Consult 160,000  71300 - Local Consult 65,000  71600 - Travel 105,000  72500 – Office Supplies 10,000  73100 – Rental/ Premises 100,000  74200 – AV/Publications 50,000  74500 – Misc 10,000  72600 - Grants - 700,000</p> <p>Subtotal Output 3: 1,556,765</p>
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		<ul style="list-style-type: none"> <li>• Assessment of feasibility of multi-donor recovery trust fund</li> <li>• Establish and promote Recovery Seed mechanism</li> <li>• Implement Recovery Seed Fund</li> <li>• Produce Pacific Recovery Fund guidelines</li> <li>• Support governments to implement recovery projects which are gender mainstreamed, risk-informed and reduce vulnerability to disaster</li> <li>• Pacific recovery case studies</li> <li>• Inventory of national recovery financing in Pacific</li> <li>• Assessment of barriers to recovery funding</li> <li>• Provide technical assistance to government to establish national disaster reserve funds</li> <li>• Technical assistance provided to make recovery seed fund operational, and ensure recovery projects are risk informed</li> </ul>		
<i>Subtotal Output 3</i>				<i>1,556,765</i>
<b>Sub Total</b>				<b>5,870,295</b>
<b>Staff Costs</b>				<b>671,316</b>
<b>Travel and Office Costs</b>				<b>208,389</b>
<b>Evaluation and Audit</b>				<b>150,000</b>
<b>General Management Services (8%)</b>				<b>600,000</b>
<b>Total</b>				<b>7,500,000</b>

## ANNUAL WORK PLAN

### June 2016 – May 2017

Note that the annual work plan anticipates project approval in the mid-2016 and provides a one year work plan henceforth. The work plan would need to be revised and adjusted to the calendar year financial cycle of UNDP.

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET			
		June - Dec 2016		Jan - May 2017			Funding Source	Budget Description	Amount	
		Q3	Q4	Q1	Q2					
Output 1: Strengthened early warning and climate information and communication capacity in selected PICs with a view to reduce losses and impact on the most vulnerable. (5-10-50 Pathway 3)	AR 1.1 Increased capacity within national and regional meteorological services to generate user-relevant information on climate risks					UNDP, SPREP, NSM, Sectors	UNDP Russia Trust Fund	25700 - Workshop; Training	41,018	
Target (Year 1) <ul style="list-style-type: none"> <li>• 2 Sector CLEWs trainings conducted</li> <li>• 2 data sharing agreements signed</li> <li>• 2 Sector-NMS workshop groups established</li> <li>• National climate outlook forum conducted</li> <li>• Communication and media training provided to NMS</li> <li>• Knowledge exchange tour</li> </ul>	Assess gaps and weaknesses in the current climate monitoring network and fill gaps with repair, upgrade or installation of weather stations	x						61100 - Staff	36,916	
	Procure equipment			x	x			61300 - Service Contractors	24,611	
	Design and build a data quality assurance process and user interface for the climate database.			x	x			71200 – Intl Consult:	24,611	
	Provide training and capacity building to improve climate forecasting, and tracking and monitoring emerging climatic risks			x	x			71300 - Local Consult	16,407	
	Collect and collate meteorological and physical observations				x			x	71600 - Travel	20,509
									72800 - ICT Equip	205,088
									72200 - Equip & Mach	410,176
									72300 - Goods and Materials	164,070
	Knowledge exchange tour			x				73100 - Rental	6,153	
Establish sector-NMS working group for regular climate briefings					x	74500 – Misc	4,102			
Establish data sharing agreements and arrangements between sectors and NMS					x					

								<i>AR 1.1 subtotal</i>	953,659
	AR1.2 Increased capacity of selected PICs to disseminate and use tailored information on climate to relevant end users.							25700 - Workshop; Training	57,425
	CLEWS training and capacity building for sectors			x	x		UNDP, SPREP, NSM, WMO, Sectors	61100 - Staff	36,916
	Conduct communication and media training for NMS and sectors				x			71200 - Intl Consult	24,611
	Convene national forums to increase sector understanding of climate services				x			71200 - Local Consult	16,407
								71600 - Travel	20,509
								73100 - Rental	14,766
								74500 - Misc	4,102
								<i>AR 1.2 subtotal</i>	174,735
<b>Subtotal Output 1</b>									<b>1,290,413</b>
<b>Output 2: Institutionalize capacities to manage effective recovery processes to reduce risks and promote resilient development (5-10-50 pathway 4)</b>	AR 2.1 Strengthen capacity of selected PIC government to establish, coordinate and manage disaster preparedness and post disaster recovery	x	x	x	x		UNDP, National Governments, Sectors	25700 - Workshop; Training	49,221
Targets (year 1) • 2 assessments of post-disaster planning and programming approaches • 2 recovery events with PHT • 3 National Trainings on Recovery processes • 3 Historical Loss and Damage Data bases supported • 2 national meetings to establish recovery policy, structure and processes • Agreement on PDNA coordination/roles with PHT members	Assess existing post disaster planning and programming approaches in selected PICs, including gender analysis		x					61100 - Staff	36,916
	Provide training and technical assistance to develop national recovery frameworks, including gender mainstreaming in recovery			x	x			61300 - Service Contractors	16,407
	Support national governments to ensure collection of sex-disaggregated baseline data in key sectors					x		71200 - Intl Consult:	41,018
	Technical assistance in recovery provided to national and sub-national governments		x	x	x			71300 - Local Consult	20,509
	Technical assistance in recovery provided to regional partners and regional coordination mechanisms		x	x	x			71600 - Travel	14,766
								72800 - ICT Equip	12,305
								72500 - Office Supplies	4,102
						73100 - Rental		13,126	
						74500 - Misc		1,231	
							<i>AR 2.1 subtotal</i>	209,600	

	AR2.2. Enhanced capacity of the Pacific Humanitarian Team to provide recovery support to countries following disaster events							25700 - Workshop; Training	16,407	
	Identify PHT coordination mechanisms for post disaster recovery efforts			x	x			61100 - Staff	36,916	
	Provide technical assistance to UN Country Team to integrate recovery		x	x	x			71600 - Travel	14,766	
								72500 - Office Supplies	1,641	
	Identify value-added roles for relevant agencies in recovery			x	x			73100 - Rental	13,126	
								74500 - Misc	1,231	
								AR 2.3 subtotal	84,086	
	Output 2 Subtotal								293,686	
Output 3: <b>Increased use of financial instruments to manage and share disaster related risk and fund post disaster recovery efforts at the national and local level (5-10-50 pathway 4)</b>	AR 3.1 Increased uptake of insurance by individuals, communities, enterprises and government agencies							25700 - Workshop; Training	16,407	
Targets (Year 1) • 1 Assessment of constraints to private insurance uptake including review of institutional/legal environment of disaster insurance and risk-sharing mechanisms • 1 Assessment of public sector insurance cover • 2 awareness sessions for financial institutions • Recovery Fund Guidelines produced • Recovery Fund operational	Assess key constraints and impediments to private insurance uptake including review of institutional/legal environment of disaster insurance and risk-sharing mechanism in select PICs	x	x					61100 - Staff	36,916	
								71200 - Intl Consult:	24,611	
								71300 - Local Consult	16,407	
	Conduct awareness raising activities with financial institutions in selected PICs to demonstrate the benefits of insurance cover				x	x		71600 - Travel	14,766	
								72500 - Office Supplies	1,231	
	Assess the level of public sector insurance cover for key economic areas				x	x		73100 - Rental	13,126	
								74200 - A/V Publications	4,102	
							74500 - Misc	1,231		
								AR 3.1 subtotal	128,795	
	AR 3.2 Increased use of financial instruments to fund post disaster recovery efforts						UNDP	UNDP Russia	61100 - Staff	36,916

	Establish and promote Recovery Seed mechanism		x	x		Trust Fund	71300 - Local Consult	16,407
							71600 - Travel	14,766
							72500 - Office Supplies	1,231
	Produce Pacific Recovery Fund guidelines			x	x		73100 - Rental	13,126
							74200 - A/V Publications	8,204
	Implement Recovery Seed Fund				x		74500 - Misc	1,231
							72600 - Grants	82,035
							<i>AR 3.3 subtotal</i>	173,915
<b>Output 3 Subtotal</b>								302,710
<b>SUBTOTAL 2016</b>								2,074,260
<b>Staff Costs</b>								183,572
<b>Travel and Office Costs</b>								56,984
<b>+ 8% Admin Cost</b>								185,185
<b>TOTAL 2016</b>								2,500,000

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## XI. MANAGEMENT ARRANGEMENTS

The project will be directly implemented (DIM) by the UNDP Pacific Office. The project will be further supported by UNDP Multi-Country Offices in the Region.

### 1. Organizational structure for project execution and implementation

#### a. Management Structure

The project will be managed by the UNDP Pacific Office Resilience and Sustainable Development team, located in Fiji.

**Project Board** - The project will receive *strategic guidance* from a Project Board; the Project Board will provide oversight and be overall responsibility for providing high level strategic directions for the project, such as ensuring that the project is focused on achieving its stated objectives throughout its life cycle, delivering quality outputs that will contribute to higher level outcomes. The Board makes management decisions for a project when guidance is required by the Project Manager and when project tolerances have been exceeded.

Based on the approved annual work plan (AWP), the Project Board reviews and approves project stage plans and authorizes any major deviation from these agreed stage plans. It is the authority that signs off on the completion of each stage plan as well as authorizes the start of the next stage plan. It ensures that required resources are committed and arbitrates any conflicts within the project or negotiates a solution to any problems between the project and external bodies.

In order to ensure UNDP's ultimate accountability for the project results, Project Board decisions will be made in accordance with standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition. In case consensus cannot be reached within the Board, the final decision shall rest with the UNDP.

The members of the Project Board are identified in Figure 1 below. Representatives of other stakeholders can be included in the Board as appropriate. The Board contains four distinct roles:

- **Executive:** individual representing the project ownership to chair the group. For this project the UNDP Pacific Office will assume this role.
- **Development Partners/Senior Supplier:** individual or group representing the interests of the parties concerned which provide funding for specific cost sharing projects and/or technical expertise to the project. The primary function within the Board is to provide guidance regarding the technical feasibility of the project. Russia will assume this role.
- **Beneficiary Representative:** individual or group of individuals representing the interests of those who will ultimately benefit from the project. The primary function within the Board is to ensure the realisation of project results from the perspective of project beneficiaries. Nominated representatives of the beneficiary countries will serve on the Project Board in this capacity.
- **Project Assurance:** this role is the responsibility of each Project Board member; however the role can be delegated. The project assurance role performs objective and independent project oversight and monitoring functions, independent of the Project Manager, ensuring appropriate project management milestones are managed and completed. UNDP Pacific Office or designate, will provide quality assurance oversight. The UNDP DRR units within the UNDP Regional Hub may be requested to provide technical, policy advisory or operational support.

The Project Board will meet at least every six months to review the project progress, approve annual work plans and address any issue deemed of importance.

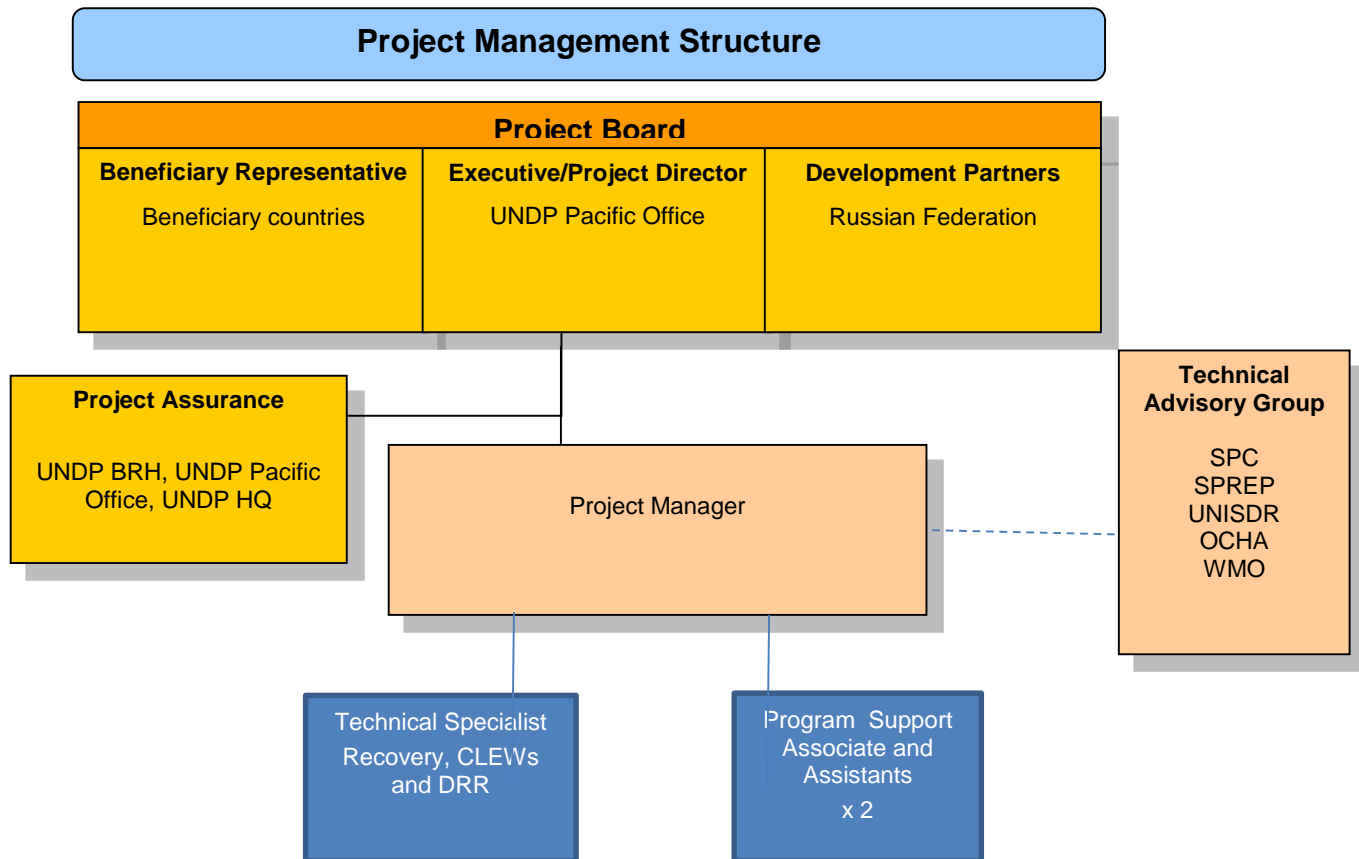


Figure 1. Project Board Structure

## b. Project Implementation Team

This project will be implemented by the UNDP Pacific Office under the UNDP Direct Implementation Modality (DIM). UNDP Pacific Office will be responsible for the *overall management* of the project and the teams. UNDP Pacific Office will be the entity responsible and accountable for day-to-day management of the project, including monitoring and evaluation of project interventions, achieving project outputs, and for the effective use of resources.

Project funds will be habilitated to the project account and distributed between the Output IDs in ATLAS according to the Results and Resources Framework. Funds will be made available to Country Offices according to the share of national-level activities implemented and supported by each CO. The Country Offices will be responsible for financial disbursements and provision of administrative/operational support for the implementation of national components. With the support of the project staff and technical specialists (located as per project activity demand), country offices will facilitate the liaison with the key government stakeholders and ensure linkages with other ongoing national projects and programmes in the area of climate early warning, preparedness and recovery and disaster risk financing to maximize the impact of interventions and ensure long-term sustainability of results.

Staffing will include a full time national Project Manager, an International Recovery Advisor, a national Climate Early Warning System specialist, a national Disaster Risk Reduction specialist, a program



associate and two assistants. The location of project staff will be determined by thematic and national implementation technical assistance requirements. The project will also benefit from the technical support of international staff support at UNDP BRH. The project team will support fourteen countries in the region, providing technical assistance, training, and capacity development through regional activity implementation and coordination in addition to direct support to specific target countries. The TORs for the posts below can be found in Annex 4.

**Project Manager:** UNDP will appoint a full time Project Manager based at the UNDP Pacific Office to administer day-to-day project implementation. The Project Manager's primary responsibility is to ensure that the project produces the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost. An important task for the project manager will be to work closely with other agencies providing assistance to the PICs to determine the priority needs and gaps to be addressed in PIC and how best to utilise project funds to achieve maximum impact. Such parties will be directly accountable to the UNDP Pacific Office in accordance with the terms of an agreement or contract. Responsible parties will be identified, assessed and selected based on the mandate, experience, expertise, capacities, etc. in a specific substantive area. In addition in some cases companies will be involved and they will be selected on the basis of a competitive procurement process undertaken through the UNDP Pacific Office.

The Project Manager will ensure the liaison and coordination with the Project Board, UNDP Pacific Office, UNDP Focal points in target countries, the regional agencies, national governments, other UN agencies and the donor. The Project Manager will be responsible for communication and public relations and will engage directly with the representatives of regional agencies and UNDP Senior Management. The Project Manager will ensure communication offices and public relations staff of regional and national institutions are informed about project advances and relevant issues. To ensure that project implementation is adequately informed and contextualized, the project management will be supported by the CCDRM Specialists based in the Pacific Office, UNDP Bangkok Regional Hub and BPPS in NY.

The Project Manager will formulate the Annual Work Plan (AWP), review the quarterly, annual and final reports, project revisions and requests donor fund transfer, for the approval of the UNDP Pacific Office. At the end of the project he/she will prepare a proposal for the transfer of goods acquired with the Project resources.

S/he will be responsible for the overall technical supervision, management, implementation, and monitoring of the Project outputs. S/he will be responsible for the formulation of quarterly and annual work plans and reports and will review and comment on the technical reports by consultants and companies or institutions. S/he will participate in the contracting panels and tender committees for the procurement of goods and services, ensuring the compliance of documentation with the technical specifications and Project objectives. S/he will also be responsible for the development and implementation of the project monitoring and evaluation strategy and plan, ensuring quality of performance indicators and their timely collection. S/he will supervise and evaluate the work of consultants, coordinate activities with UNDP Regional Bangkok, UNDP Country Offices, and regional agencies and manage technical, logistical and administrative processes to ensure the achievement of Project Outputs. S/he will oversee the formulation of terms of reference for persons and/or commercial enterprises to be contracted by the project and will prepare technical specifications for the goods/services to be acquired. The Project Manager will need to have extensive project and staff management experience, and experience in disaster risk management.

The **Project Associate** role will report to the Project Manager; this role provides analytical support on project planning and implementation; support in monitoring, evaluation and reporting across all countries, with inputs from Technical Officers; assist in administration and implementation of programme delivery through ATLAS-based processes and procedures; support to results-based

management on project achievements; support in knowledge management and partnership coordination as directed.

The **Programmes Assistants** roles will assist the Project Manager and the Technical Specialists with administrative support. Key functions include the provision of effective administrative and logistics support; scheduling of meeting appointments and draft minutes of meetings; assistance with financial management tasks; assistance with project procurement processes; support to project reporting, and data and records management tasks; and assistance with the production of knowledge products.

### **c. Technical Team**

**Technical Specialists** will be responsible providing technical inputs to all project activities under the project, and assures the quality of field activities. They are also responsible for providing technical advice and mentoring to project staff and national counterparts. There will be three technical specialists' positions: Recovery Advisor, Climate Early Warning specialist and a Disaster Risk Reduction Specialist.

- The Recovery Advisor will provide technical expertise to all pre-disaster recovery planning at a national level, regional PHT recovery leadership, respond to disaster events, and conduct post-disaster needs assessments, training and delivery. The Recover Advisor will help develop the Recovery Fund mechanisms and support recovery programs. S/he will help countries request emergency funding (TRAC 3) and recommend and plan for early and longer term recovery; s/he will undertake missions as required to provide technical advice on programme planning and national capacity building for early economic and social recovery interventions that clearly promote relief development linkages.
- The Climate Early Warning Specialist will provide technical support to National Meteorological Services to produce, deliver, and communicate climate information to Line Ministries. S/he will help facilitate linkages between NMSs and sectors, and provide support to both in identifying the climate services required. S/he will provide technical assistance in coordinating trainings, briefings and community oriented services. S/he will provide support to country offices to integrate climate science into programming, and work in collaboration with the DRR specialist to ensure that programming reflects an integrated CCDRM approach.
- The Disaster Risk Reduction Specialist will ensure support to national recovery planning process to ensure the integration of disaster-climate risk perspective into policy and programming. S/he will provide technical assistance to country offices to analysis and promote different options of disaster risk financing to PICs, and coordinate project assessment activities. S/he will develop the Recovery Fund, oversea its implementation and monitor results.

### **d) Additional Technical Support (non-staff)**

**Short-Term Technical Experts (available for regional and national level work)** will be hired on a needs basis to work on specific tasks related to climate early warning, disaster preparedness and recovery and DRR law, disaster risk financing. Consultants will be selected on the basis of specific TORs elaborated in consultation with relevant stakeholders. Consultants can be selected from UNDP expert rosters or go for open tender as necessary.

**National Project Coordinators** are personnel who are embedded within government agencies who to support national project activity implementation in the areas of CLEWS and national pre-disaster recovery programming, where there is a need for additional coordination support.

A **Technical Advisory Group** is proposed to provide strategic technical oversight to the Project Manager for effective implementation, including building synergies with ongoing activities in the region and ensuring alignment with regional objectives. This would be inclusive of a number of technical agencies such as SPC, SPREP, PMC and UN Agencies such as WMO and OCHA. Membership may be determined so as to best provide guidance in relation to the specific project activities. Meetings of the Group may be once or twice a year, or as otherwise determined.

Project technical oversight: BPPS 5-10-50 advisory team on Disaster Preparedness and Post Disaster Recovery will provide technical guidance to project implementation and will participate in annual review and regular monitoring of project implementation.

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## XII. MONITORING FRAMEWORK AND EVALUATION

The project Monitoring and Evaluation (M&E) plan is an integral part of the corporate *Result Based Management approach*, which calls for specific focus on the achievement of results. It will aim to conduct *strategic monitoring* of outcome level indicators; and *operational monitoring* of key milestones through performance indicators.

The Project M&E plan will be based on the baselines, indicators and targets spelled out in the Logical Framework Matrix. The detailed M&E plan will be elaborated upon approval of the project annual work plan in ATLAS and will follow the procedures established in the UNDP program and Operation Policies and Procedures (POPP):

### Within the annual cycle

- On a quarterly basis, a quality assessment shall record progress towards the completion of key results, based on quality criteria and methods captured in the Quality Management table below.
  - An Issue Log shall be activated in Atlas and updated by the Project Manager to facilitate tracking and resolution of potential problems or requests for change.
  - Based on the initial risk analysis submitted (a risk log shall be activated in Atlas and regularly updated by reviewing the external environment that may affect the project implementation.
  - Based on the above information recorded in Atlas, a Project Progress Reports (PPR) shall be submitted by the Project Manager to the Project Board through Project Assurance, using the standard report format available in the Executive Snapshot.
1. A project Lesson-learned log shall be activated and regularly updated to ensure on-going learning and adaptation within the organization, and to facilitate the preparation of the Lessons-learned Report at the end of the project
  2. A Monitoring Schedule Plan shall be activated in Atlas and updated to track key management actions/events

### Annually

- **Annual Review Report.** An Annual Review Report shall be prepared by the Project Manager and shared with the Project Board. As minimum requirement, the Annual Review Report shall consist of the Atlas standard format for the QPR covering the whole year with updated information for each above element of the QPR as well as a summary of results achieved against pre-defined annual targets at the output level.
- **Annual Project Review.** Based on the above report, an annual project review shall be conducted during the fourth quarter of the year or soon after, to assess the performance of the project and appraise the Annual Work Plan (AWP) for the following year. In the last year, this review will be a final assessment. This review is driven by the Project Board and may involve other stakeholders as required. It shall focus on the extent to which progress is being made towards outputs, and that these remain aligned to appropriate outcomes.

### End of Project Cycle

- An independent *final external evaluation* will be conducted upon completion of the project activities by an external consultant.
- All relevant findings of the evaluation will be shared with all the stakeholders involved in the implementation of the project. Stakeholders that will be interviewed during the evaluation will include regional agencies, national stakeholders, public sector institutions, donors and other relevant stakeholders.
- The extension of the project will be evaluated on the basis of the evaluation results.

### XIII. QUALITY MANAGEMENT FOR PROJECT ACTIVITY RESULTS

OUTPUT 1: Strengthened early warning and climate monitoring capacity in selected PICs		
<b>Activity Result 1.1</b>	Increased capacity within national and regional meteorological services to generate user-relevant information on climate risks	Start Date: 2016 End Date: 2018
<b>Purpose</b>	To strengthen existing climate observation/monitoring networks, build data competencies, and strengthen the capacity of NMSs to generate climate and alerts in selected PICs.	
<b>Description</b>	The activity will be achieved by assessing gaps in the current climate monitoring network and increasing capacity to generate user-relevant information on climate risks. Data management support activities include upgrade of data monitoring equipment; implementation of data quality assurance process and user interface for climate database; strengthening of data integration and analysis for sectors; improving analysis of past-climate records and data archiving systems. At a national level, trainings and capacity building on best practice data processing and archiving approaches will be held, as well as trainings for hardware operations and maintenance. Data from observing networks will be transferred to CliDE and accessibility to homogenized data will be developed. Data exchange agreements will be arranged between Met and Hydrology divisions, as well as with agricultural and health sectors.	
<b>Quality Criteria</b>	<b>Quality Method</b>	<b>Date of Assessment</b>
Assess NMSs gaps and weaknesses	Consultations; Correspondences; Reports on gaps.	End of fiscal year
Implement data quality assurance process and user interface for climate database	Quality assurance checklist; user-interface.	
Upgrade weather monitoring equipment	Procurement and financial records	
Trainings on best practice data processing and archiving	Agendas; list of participants; reports.	
Trainings on hardware operations and maintenance	Agendas; list of participants; reports.	
Data exchange agreements	Correspondence; signed agreements.	
Establish sector-NMS working groups	Consultations; minutes; climate briefings.	
<b>Activity Result 1.2</b>	Increased capacity of selected PICs to disseminate and use tailored information on climate to relevant end users.	
<b>Purpose</b>	To strengthen the engagement of NMS with specific sectors to ensure that climate services respond to their needs.	
<b>Description</b>	This activity will support sectors' capacity to understand climate risk and collect and analyze climate data to inform climate products. Collaboration of NMSs with sectors will be strengthened, and climate EWS information will be improved with sector inputs for end-user relevance. Guidelines for public and institutional data accessibility and sector specific data collection will be developed, as well as a guide to climate services. Sector based SOPS for climate risk will be ensured and data collection and sharing protocols for Ministries will be established. Trainings and capacity building for sectors on CLEWS and provision of data/ establishment of climatic patterns will be held, and national and regional forums will increase sector understanding of climate risk. NMS will be trained in communication and media. SSC activities for sharing the CLEWS experiences, tools and procedure in the region in the Pacific will be part of this activity.	

Quality Criteria	Quality Method	Date of Assessment
Strengthen collaboration of NMS with sectors	Joint provision of climate services; correspondences; reports.	End of fiscal year
Develop guidelines for public and institutional data accessibility	Consultations; guidelines developed.	
Develop a guide to climate services and guidelines for sector specific data collection	Consultations; guide and guidelines developed.	
Establish data collection and sharing protocols for Ministries	Correspondences; protocols.	
Conduct CLEWS trainings for sectors	Meeting records, minutes, correspondence, logistical and financial records; agendas; list of participants; rapporteur report.	
Organize National and Regional forums on climate services	Meeting record; logistical and financial records; agendas; list of participants; final reports.	
Conduct training for NMSs in communication and media	Meeting record; logistical and financial records; agendas; list of participants; final reports.	
Share CLEWS experiences in the Pacific	Technical assistance reports; best practices and case studies systematization.	

**OUTPUT 2: Preparedness and planning mechanisms and tools to manage disaster recovery processes strengthened at regional, national and local level**

<b>Activity Result 2.1</b>	Strengthen capacity of selected PIC government to establish, coordinate and manage disaster preparedness and post disaster recovery	Start Date: 2015 End Date: 2016
<b>Purpose</b>	To assist selected PICs to develop targeted disaster preparedness and recovery policies and operating procedures	
<b>Description</b>	This activity will be achieved by assessing existing recovery approaches in selected PICs and assisting governments in developing pre-disaster recovery processes and frameworks. Direct support will be given to develop appropriate analysis, tools and guidelines in preparation for recovery. National and sub-national coordination mechanisms will be established. Governments will be assisted in planning for recovery monitoring and in ensuring baseline data for each sector. National capacity building and technical assistance will include PDNA, post disaster planning, programming and coordination approaches and monitoring implementation of recovery frameworks.	
Quality Criteria	Quality Method	Date of Assessment
Assess recovery preparedness planning and programming in selected PICs	Consultations; correspondences; Reports on existing approach.	End of Fiscal year
Develop pre-disaster Recovery processes and frameworks	Consultations; correspondences; process charts; recovery framework.	
Develop MOUs for data sharing between Ministries	Correspondence; signed MOUs.	
PDNA trainings	Agendas; participant lists; final report.	

Guidelines, regulations and policies that incorporate disaster resilience into recovery	Consultations; correspondences; polices developed.	
Produce knowledge products	Systematization of lessons learned; case studies; good practices in recovery; Guide to Planning for Recovery.	
<b>Activity Result</b> 2.2	Enhanced capacity of the Pacific Humanitarian Team to provide recovery support to countries following disaster events	Start Date: 2016 End Date: 2018
<b>Purpose</b>	To increase the number of resources at a regional level able to provide support to countries to manage and coordinate post-disaster recovery and pre-disaster planning and programming.	
<b>Description</b>	The activity will be achieved by strengthening PHT leadership in recovery through training, workshops, events and information sharing, and enhancing PHT coordination mechanisms to ensure timely inputs from PHT member agencies to post disaster recovery efforts. PHT will be supported to work with regional actors to ensure pre-disaster recovery baseline in respective areas and to conducts inter-agency disaster needs assessments. Regional partners will be trained in recovery assessment methodologies. Active support for resource mobilization for recovery at a national level will be provided.	
<b>Quality Criteria</b>	<b>Quality Method</b>	<b>Date of Assessment</b>
Trainings/Workshops for PHT members	Agendas; participant lists; information sharing documents.	End of Fiscal year
Enhance PHT and post-disaster coordination mechanisms	Correspondences; minutes; agreements.	
Collaborate with regional and humanitarian actors	Correspondences; minutes; regional trainings reports;	
PDNAs effectively managed at country level, leading to recovery frameworks	PDNA reports; recovery frameworks	
Initial Damage Assessment and PDNA demonstrate mutual relevance	Modified assessment tool	
Technical assistance provided to recovery countries	Technical assistance report; recovery project proposals; recovery projects monitoring records	

### OUTPUT 3: Increased use of financial instruments to manage and share disaster related risk and fund post disaster recovery efforts

<b>Activity Result</b> 3.1	Increased uptake of insurance by individuals, communities, enterprises and government agencies	Start Date: 2016 End Date: 2018
<b>Purpose</b>	To better manage disaster risk and reduce the potential economic and social impact of weather related disasters.	
<b>Description</b>	The activity will be achieved in collaboration with national governments, insurance companies, relevant regional agency programmes and PFIP. An assessment of key constraints to the uptake of insurance will be conducted in selected PICs. Awareness raising activities with financial institutions will be conducted to highlight the benefit of insurance cover and innovative cost effective insurance policy options will be identified together with insurance companies at the national level. Risk reduction measures to gain cost-effective coverage will be identified. Small to medium business	

	enterprises will be trained to develop business continuity plans. The activity will include an assessment of public sector insurance cover for key sectors, to enhance collaboration for advancing public sector insurance schemes.	
<b>Quality Criteria</b>	<b>Quality Method</b>	<b>Date of Assessment</b>
Assessments of demand and constraints in private and public sector insurance uptake	Consultations; correspondences; reports.	End of Fiscal Year
Conduct awareness raising activities	Agendas; participant lists; communication material; final reports.	
Collaborate with insurance companies	Consultations; correspondences.	
Train business enterprises (business continuity plan)	Training material; workshops; final reports.	
<b>Activity Result</b> <b>3.2</b>	Increased use of financial instruments to fund post disaster recovery efforts	Start Date: 2016 End Date: 2016
<b>Purpose</b>	To identify, access and/or establish funding facilities for post disaster recovery, post disaster reserve funds and a UNDP managed post disaster recovery community support fund	
<b>Description</b>	This activity will be achieved by establishing an Recovery Seed Fund to assist with recovery at a community level, and providing technical support for tis implementation in recovering countriesThe feasibility of using this Recovery Fund to establish a multi-donor standing recovery fund in the region will be examined. The integration of CCDRM into recovery projects will contribute to community resilience.	
<b>Quality Criteria</b>	<b>Quality Method</b>	<b>Date of Assessment</b>
Establish Recovery Seed Fund	Fund mechanism report; guidelines and communication materials; financial reports.	End of Fiscal Year
Recovery Seed Fund operational	Project proposals; Project reports; financial reports; case studies	
Support a feasibility study for national recovery fund	Consultations; correspondences; study report.	

#### **XIV. LEGAL CONTEXT**

This project forms part of an overall programmatic framework under which several separate associated country level activities will be implemented. When assistance and support services are provided from this Project to the associated country level activities, this document shall be the “Project Document” instrument referred to in: (i) the respective signed SBAA for the specific countries; or (ii) in the Supplemental Provisions attached to the Project Document in cases where the recipient country has not signed an SBAA with UNDP, attached hereto and forming an integral part hereof. All references in the SBAA to “Executing Agency” shall be deemed to refer to “Implementing Partner.”

This project will be implemented by the agency (name of agency) (“Implementing Partner”) in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply.



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## **XV. RISK MANAGEMENT STANDARD CLAUSES**

1. UNDP as the Implementing Partner shall comply with the policies, procedures and practices of the United Nations Security Management System (UNSMS.)
2. UNDP agrees to undertake all reasonable efforts to ensure that none of the project funds are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via [http://www.un.org/sc/committees/1267/aq\\_sanctions\\_list.shtml](http://www.un.org/sc/committees/1267/aq_sanctions_list.shtml). This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.
3. Consistent with UNDP's Programme and Operations Policies and Procedures, social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (<http://www.undp.org/ses>) and related Accountability Mechanism (<http://www.undp.org/secu-srm>).
4. The Implementing Partner shall: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.
5. All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.

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## **XVI. ANNEXES**

Annexes:

1. National and Regional Activities
2. Offline Risk Log
3. Social and Environmental Standards Checklist
4. Terms of Reference of Key Project Personnel
5. RESPAC project synergies with existing UNDP portfolio