### PROJECT DOCUMENT [Regional Project]



I. PROJECT TITLE: STRENGTHEN CLIMATE & HYDROLOGY EARLY WARNING SYSTEMS IN SELECTED PACIFIC ISLAND COUNTRIES (PICS)

Resilient nations.

My global charge

**Project Number:** 

Implementing Partner: UNDP

Start Date:

June 2017

End Date: December 2018

**PAC Meeting date:** 

31 May 2017

Brief Description

In the Pacific, one of the major development challenges is the ineffective disaster preparedness, response and recovery due to the Pacific's vulnerability to the frequent climate-related disasters. The project, Strengthening/Climate & Hydrology Early Warning systems in seven selected PICs, aims to enhance Pacific Island Countries adaptive capacities for disaster preparedness, response and recovery. This will be realised through two main pathways for the seven selected Pacific Island Countries: :1) strengthening early warning and disaster risk human resources capacities of national meteorology and hydrology services, and 2) strengthening early warning and disaster risk technical capacities of national meteorology and hydrology services.

These two outputs will deliver the following expected result: will enable, seven countries to Pacific Island Countries benefit from South-South Cooperation in enhancing human and technological capacities on climate and hydrology early warning systems by end of 2018. These expected results will contribute directly to the SRPD (2014-2017) Outcome 3 where Countries are able to reduce the likelihood of conflicts and lower the risk of natural disasters including from climate change.

Contributing Outcome (UNDAF/CPD, RPD or GPD):

**SRPD (2014-2017) Outcome 3** where Countries are able to reduce the likelihood of conflicts and lower the risk of natural disasters including from climate change Indicative Output(s):

Percentage of countries with disaster and climate risk management plans that are fully funded in national, local and sectorial development budgets

Total resources required:	-	US1,000,000
Total		
resources allocated:	UNDP TRAC:	
	Government of	1,000,000
	India:	/1,000,000 \
	Government:	tbd
	In-Kind:	500,000 /
Unfunded:		0

Agreed by (signatures)1:

Government	UNDP	Implementing Partner /
	UNDP Pacific Office in Fiji	UNDP Pacific Office in Fiji
Print Name:	·	
	Print Name:	Print Name:
Øate:	Date:	Date:

<sup>&</sup>lt;sup>4</sup> Note: Adjust signatures as needed

### DEVELOPMENT CHALLENGE

The Pacific Island Countries (PICs) are amongst the most vulnerable countries in the world. Spread across the Pacific Ocean with widely varying topographies, cultures, and economies, they share the same critical challenges and vulnerabilities that contribute to *ineffective disaster preparedness, response and recovery*. PICs face dire and immediate consequences from the impacts of climate change - from sea level rise and stronger storms to the changing distribution of disease vectors. Their geographic isolation, small and scattered populations, fragile environments and limited resources severely restrict their capacity to adapt to climate change impacts, resulting in significant economic losses, and limit national development opportunities and investments<sup>2</sup>.

The Intergovernmental Panel on Climate Change (IPCC) has recently highlighted that the survival of Pacific countries is at extreme risk from sea-level rise. More than 50% of the region's population live within 1.5 km of the shoreline and many islands are less than a few meters above sea level. Thus, an increase of as little as half a meter, along with increased storm surges, would completely inundate many critical areas and threaten their populations. In general, the impacts of sea-level rise differ between low (e.g., atoll) and high (e.g., volcanic) islands. This is especially the case for saltwater contamination of both groundwater and soils, generally making low islands much more vulnerable. Sea-level rise and higher expected frequencies and intensities of storms and cyclones increases the potential of seawater intrusion into underground water aquifers, as already experienced by many coastal communities wherein water quality and availability directly affects people's livelihoods.

The PICs are exposed to extreme weather events such as tropical storms/cyclones, droughts, floods, and heat waves. Since 1950, extreme events have affected 9.2million people in the region, causing 9,811 fatalities. According to the SPC-SOPAC report "Hydro-meteorological Disasters in the Pacific", 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.

Tropical Cyclones represent 42% of all disasters in the Pacific region between 1983 and 2012<sup>3</sup>. In 2004, Cyclone Heta caused storm waves to rise over the 30 meter cliffs in Niue, leaving one person dead and many others homeless, and causing \$150 million in damage. In early 2005, the Cook Islands experienced five cyclones within a five-week period, four of which were classified as Category 5. In the prior decades, the Cook Islands could expect a storm of this magnitude approximately every 20 years. Recently in 2016, a Category 5 tropical cyclone Winston, the strongest ever recorded in the region devastated Fiji causing a destruction to the value of F\$2.85 billion (US\$1.3 billion).<sup>4</sup>

Floods are the second most common disaster, representing 16% of disasters in the region. 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.

Droughts correspond to 4% of natural disasters in the region. In 2011, a period of severe drought impacted the island countries of Tuvalu and Tokelau, resulting in a declaration of emergency. 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>&</sup>lt;sup>2</sup> https://www.adb.org/sites/default/files/publication/27476/climate-change-pac.pdf

 $<sup>^3</sup>http://www.wmo.int/sids/sites/default/files/Statistical\%20Summary\%20\%20Hydrometeorological\%20Disasters\%20in\%20the\%20Pacific.pdf$ 

 $<sup>\</sup>frac{4 \text{https://www.gfdrr.org/sites/default/files/publication/Post%20Disaster\%20Needs\%20Assessments\%20CYCLONE\%20}{WINSTON\%20Fiji\%202016\%20\{Online\%20Version\}.pdf}$ 

Sea Level Rise (SLR) is a serious threat to Pacific SIDS, depending on their island geophysical 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. SLR will degrade fresh groundwater supplies and reef ecosystems, a basis for tourism and subsistence fisheries, impacting the population and way of life and increasing the risk of displacement and outward migration.

Many of these extreme weather events can be linked to the El Niño/La Niña-Southern Oscillation (ENSO) pattern. Recent modelling studies indicate more El Niño-like conditions as a result of global warming—with central and eastern equatorial Pacific sea surface temperatures projected to warm more than the western equatorial Pacific. Corresponding rainfall patterns, as well as the area of tropic cyclone formation, have been shifting eastward. Wet areas are likely to become even wetter, while unusually dry areas could become even drier. Heavier damages are expected from increased risks of coastal erosion and flooding due to wave and storm surges. Flooding is likely to cause a loss of coastal and industrial infrastructure, (e.g., roads, settlements, and marine installations) particularly in low-lying areas. Long dry periods will reduce water supplies to critical levels and increase forest fires. Drought caused by the El Niño effect in the Pacific is a serious and increasingly regular occurrence. Each El Niño event results in water shortages and drought in Samoa, Fiji Islands, Kiribati, Republic of the Marshall Islands, Federated States of Micronesia, Papua New Guinea, Samoa, and Tonga. Drought conditions can also significantly reduce the soil's ability to cope with sudden intense rainfall, exacerbating flooding and erosion.

With the increased severity of extreme weather events, many PICs are likely to encounter greater difficulty and may cause many of the islands of the Pacific to become uninhabitable. The capacity to anticipate and prevent major catastrophes related to extreme events (early warning systems), building technical capacity as well as increasing awareness on climate change adaptation and disaster risk reduction will significantly contribute to the reduction of PICS vulnerability to variability and longer-term changes.<sup>5</sup>

To address PICs' challenges, Pacific Island Meteorological Strategy identifies four priority areas for action: 1) improved weather services, 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.

This project is aligned with the expected results under the Pacific Islands Meteorological Strategy priority areas (3) and (4) above to enhance disaster preparedness, response and recovery (Annex 1: Theory of Change (ToC)).

### II. STRATEGY

To support PICS capacity to address their challenge, a Theory of Change (ToC) was mapped out specifically demonstrating the key development challenge for PIC of ineffective disaster preparedness, response and recovery and solution pathways chosen by this project to address the challenge resulting in improved and enhanced disaster preparedness, response and recovery for the selected seven countries. In addressing this,

Secretariat of the Pacific Community (SPC) Land Resources Division. 2010. Vulnerability of Pacific Island Countries. www.spc.int/Ird/index.php?option=com\_content&view=article&id=535&Itemid=306

the UNDP Human Development Report 2014 makes the case that "sustained enhancement of individual and societies' capabilities is necessary to reduce persistent vulnerabilities whereby progress should be about fostering resilient human development, emphasising on the role that institutions and structures can play in enhancing people and communities' ability to cope and adjust to adverse events".

The project, which is a South-South Cooperation initiative, supports the exchange of knowledge and experience on disaster preparedness, response, and recovery between the seven Pacific Islands countries (Cook Islands, Federated States of Micronesia, Kiribati, Nauru, Republic of Marshall Islands, Solomon Islands in collaboration Tonga) and with the India Institute of Technology Roorkee (IITR) (Roorkee-RTC India) and Central Training Institute (IMD) Pune-RTC India. This will be realised through main through two inter-related strategies:

### a) Strategy 1: Climate and Hydrology Early Warning Human Resource Capacity Development for both women and men technicians

The project will support the training and capacity development of hydrologists and meteorologists in the region in Pune Regional Institute, a World Meteorological Organization (WMO) accredited institute in India. The capacity development will also be targeting media organizations in the government of the seven countries to develop a gender-inclusive standard communication procedures that guide media interventions in a disaster event. This strategy will be supported by key partners including the National Meteorological and Hydrological Services Agencies for the seven countries, WMO for standard accreditation and India Institute of Technology Roorkee (IITR) (Roorkee-RTC India) and Central Training Institute (IMD) Pune-RTC India for provision of training.

### b) Strategy 2: Climate and Hydrology Early Warning Technical Capacity Development

The project will support building capacity of selected national meteorological and hydrological services by installing operational climate-hydrological early warning systems. Improving these infrastructures and communication networks will contribute to enhanced national capacities to generate and use climate and hydrological information to alert communities primarily to longer term climate risks, and secondarily to extreme weather events. This strategy will be supported by the Secretariat of the Pacific Community (SPC) as responsible party and together with NIWA as technical advisors.

### The key internal assumptions of the project are:

- Whilst the seven PIC Governments have committed to this project, it is assumed that this
  commitment will include both financial and staff time engagement during the project design and
  implementation.
- 2. It is also assumed that the project will deliver the expected results in the given timeframe, based on the available literature and research results that informed project TOC.

### The key external assumptions of the project are:

- Political will and commitment from Government in terms of providing the necessary resources i.e. land for installation of the technologies, adequate budget to support national MET and Hydrology services and relevant policy frameworks.
- 2. Conducive social, political and environmental conditions: It is assumed, based on the results of the Social and Environmental Standards Procedure for UNDP Projects (SESP) and the Risk Log, that the social, political and environmental conditions are conducive to project implementation and achievement of results. However, clear consultation and communication processes consultations and communications with all stakeholders will be undertaken to address any unforeseen project related matters.

Overall this project directly contributes to UNDAF/CPD Outcome 1: By 2022, people and ecosystems in the Pacific are more resilient to the impacts of climate change, climate variability and disasters and environmental protection is strengthened.

### **RESULTS AND PARTNERSHIPS**

### cted Results

**Output 1:**National meteorologist and hydrologist technicians in the selected 7 countries have improved capacities to provide credible data to inform early warning preparedness planning and disaster recovery.

### Activity 1.1 Regional training for meteorologists and hydrologists in PUNE Institute, India.

Support will be provided for short and medium term training courses for hydrologists and meteorologists from the seven countries in India Institute of Technology Roorkee (ITTR) (Roorkee-RTC India) and Central Training Institute (IMD) Pune-RTC India. The training, which usually run for 3weeks to 6 months, offers modules in various disciplines, such as Hydrometeorology, Telecommunication, Instrumentation, Agrometeorology and Data Processing. The completion of this training will contribute significantly to the countries' ability to:

- · Strengthen climate and hydrological monitoring.
- Ensure timely calibration, proper operation and maintenance of equipment.
- Provide internal capacity building to meteorologists and hydrologists on best practise data processing and archiving approaches that contribute to improved climate forecasting, and tracking and monitoring emerging climate risks.
- Enhance support to expand the number and coverage of climate and hydrological observations.

### Activity 1.2. Regional workshop to develop Standard Communication Procedures for media organizations.

This activity will support the effective dissemination of climate information by developing a gender inclusive hydrological and climate standard communication procedures, targeting government-owned media organizations under the Ministry of Information. This activity will ensure simplified, homogenizing procedures and methods of disseminating climate and hydrological information for public use.

### Activity 1.3: Gender inclusive impact analysis of the Project.

Support will be provided to analyse the extent to which the designed activities incorporate gender-related considerations.

### Activity 1.4: Knowledge Management

Development of knowledge products produced from lessons learnt and captured in toolkits and other knowledge products for use during training and exchange between countries

**Output 2:** The 7 selected countries are better resourced with technology critical to the provision of credible data for early warning preparedness planning and disaster recovery.

### Activity 2.1 Purchase and operationalisation of rain gauges for schools and agricultural stations

This activity will focus on the procurement of rain gauges which will be installed at agricultural research stations and secondary schools. The data will be collected and forwarded to the Met office on regular basis. Also, technical officers, especially agricultural officers on the ground can utilize this data for awareness raising of the communities. Having rain gauges in schools will build the knowledge and observation skills of students. In addition, it will also incentivize and motivate students for future career paths in science and technology as the data collected can be used in mathematics, science and related subjects.

### Activity 2.2: Purchase and operationalisation of AWS-Meteorology

The automated weather station (AWS), measuring wind speeds and direction, temperature, moisture of air and soil at different depths will be installed in strategic locations, working autonomously on solar power with

redundant communication (e.g. mobile telephone network, High Frequency radio, Wi-Fi and/or Satellite) and power supply means.

### Activity 2.3 Purchase and operationalisation of Automatic Weather Station-Hydrology equipment

Installation of Hydro-meteorological automated stations in rivers and streams in the identified countries to measure water level and volume (i.e. cubic meters per second) in addition to standard AWS measurements to support early warning for flood, drought and potentially hydro-power in dams.

### Activity 2.4 Purchase and operationalisation of Inline Salinity Meters

Groundwater is one of the most reliable sources of freshwater available to many atoll nations in the Pacific. Groundwater is pumped from shallow wells or "galleries" which are horizontal wells constructed just below the water table designed to skim the freshwater from the freshwater lens and minimise potential salinization.

In Kiribati, the Bonriki - Buota water reserve is the main supply of freshwater for over 50,000 people. The groundwater is abstracted from a system of 28 galleries and pumped via a treatment plant to the community. The salinity of the water supplied is critical in ensuring that it is acceptable to the users for its intended purpose, drinking, washing, cooking. Limits on salinity have been set by the operators and government of Kiribati on the upper limit of salinity in the water provided.

Groundwater salinity in atolls is affected by several factors including geology, island size and recharge. During droughts, when recharge is significantly reduced the groundwater will naturally increase in its salinity due to the continued discharge of groundwater to the sea and the tidal mixing processes at work. Recent 3D numerical groundwater modelling of the Bonriki water reserve has identified that the Bonriki groundwater reserve will start to experience the impact of prolonged drought through increased salinity at the pumping galleries, some 12-18 months after a period of sustained reduced rainfall. If the abstraction from the galleries remains unchecked the quality of the water, salinity, can reach a point when it will be unacceptable to the user and unsuitable for its intended potable purposes. Returning rains will allow the groundwater system to recover to salinity levels witnessed from before the drought, although this can take many months or years for a full recovery to be achieved.

An approach to drought management and early warning of the groundwater system to drought in Bonriki water reserve was developed in consultation with the Kiribati Drought Committee for Tarawa in 2011. More recently a numerical groundwater modelling was developed which tested the impact of different climate and operational management scenarios on the freshwater lens to identify optimal responses to maximize the abstraction while maintaining water quality to an acceptable limit.

The management approach takes into consideration the dynamic nature of the groundwater to identify acceptable abstraction limits which are appropriate for the observed condition of the freshwater lens, and the forecast rainfall, being based on observed and modelled freshwater lens behaviour. The management approach uses existing infrastructure and techniques such as monitoring bores, rainfall stations, and gallery monitoring of salinity and usage, already employed by the Kiribati government to determine the impact to the fresh water lens, assess risk to the water supply, and identify timely and appropriate responses.

The proposed action is to install inline salinity meters at all appropriate galleries and the main trunk lines to provide near time monitoring of the salinity of the water. The average daily and weekly salinities will be used to determine gallery performance and assess impacts from drought before it becomes unacceptable. When the salinity in the galleries or the main trunk line reaches certain thresholds then, in conjunction with the observed and forecast rainfall, and observations at existing monitoring bores, certain prescribed actions, such as reduced rate of abstraction or ceased abstraction, are enforced. This will allow the integrity of the freshwater lens to be preserved and reduce unacceptable impacts. A cost benefit study of this approach demonstrates that it can achieve large savings to government and the community over time and especially during extended dry periods.

To date, the information on salinity at the galleries is collected by handheld meters, resulting in inconsistencies with regards to measurement values as well as frequency of measurement. Inline salinity meters with loggers will greatly improve access to the raw data.

There is also a need for the information on salinity, pumping, and usage to be stored in a database application which allows the information to be easily accessed and analysed. Current data storage and analysis of these parameters is inadequate for the operational management needs of the Bonriki water reserve. It is proposed that a review of existing data and databases be undertaken to develop or procure a database fit for purpose.

Dissemination of the information on the salinity of the water and the status of the Bonriki Water Reserve is important to the government of Kiribati as well as the communities that depend upon it. Dissemination of the appropriate and up to date information will increase awareness, promote behaviour adjustment, and provide forewarning of any changes to water supply or water quality. Where appropriate, the potential for real time monitoring of certain stations, telemetry, will be considered. Publications will also be supported to assist with the extension and messaging of the salinity monitoring that will be available to be incorporated into their existing awareness campaigns.

The approach to drought early warning can be scaled to other fresh groundwater reserves in other islands of Kiribati operating at a community level, or larger water reserves such as found in Kiritimati Island. It also has application in other atoll nations such as the Republic of Marshall Islands and Tonga who need to optimise their abstraction while maintaining acceptable water quality standards especially during droughts.

### Output 3: Project Management

Output 3 will cover the implementation of the activities in countries, which will be undertaken by UNDP Pacific Office in Fiji with funding from the Government of India through the India-UNI Final Project Management will involve travel by the Suva-based staff to implementation, monitor project activities and validate.

### Resources Required to Achieve the Expected Results

The resources required to achieve the expected results are described below in two different levels, activity level and project management level.

### Activity Level:

- a) Equipment procured under the project.
  - o Automatic Weather Station- Hydrology
  - o Automated Weather Station- Meteorology
  - o Automated Rain gauges
  - Inline Salinity Meters.
- b) Human Resources that will be trained and capacitated.
  - National hydrologists and Meteorologists that will effectively operate and maintain the equipment.
- c) National media personnel
  - o Development of the Standard Communications Procedures for countries.

### **Project Management Level**

- a) UNDP technical expertise and experience in Climate Early Warning Systems and communications.
- b) UNDP Staff time to monitor and evaluate project implementation.

c) Country technical capacity and input to the project.

### **Partnerships**

Partnerships will be established with the PICs governments' partner agencies, which include the National Meteorological Services and the Ministries of Information. Other partner agencies will include the Secretariat of the Pacific Community (SPC)- Hydrological Department, National Institute of Water and Atmospheric Research (NIWA), Pacific Meteorology Council and World Meteorological Council (WMO).

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 is the oldest and largest organization in the Council of Regional Organisations in the Pacific (CROP). SPC focuses on providing technical, advisory, 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 coordinated 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 (formerly known as SOPAC) 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 Secretariat of the Pacific Regional Environment Programme (SPREP) established to facilitate and coordinate the scientific and technical program and activities of the Regional Meteorological Services. The PMC provides policy relevant advice to SPREP on the needs and priorities of its member countries and territories with regards to weather and climate.

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. Developed through extensive consultations with Members, Secretariat programme staff and partner organisations, the Plan established four strategic priorities: climate change; biodiversity and ecosystems management; waste management and pollution control; and environmental monitoring and governance.

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 cycles 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. 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 of National Meteorological Services (South-west Pacific) in capacity building through regional technical conferences, seminars and workshops to strengthen skills and expert knowledge of National Meteorological and Hydrological services; awareness, creation and promotion of activities of NMHSs and WMO through technical experts of the Secretariat; advisory services to member states; technical cooperation on project development, resource mobilization and implementation; and emergency response and assistance

This project "Strengthening Climate Early Warning Systems in PICs" is an initiative funded by the UN-India Fund to support selected PICs (Tonga, Kiribati, Solomon Islands, Federated States of Micronesia, Nauru, Republic of Marshall Islands and Cook Islands to support the countries' resilience capacity. The partnership with the Government of India will contribute to development results in several ways, including knowledge exchanges, technology transfers, and financing, etc. The partnership is expected to boost the region's capacity to address vulnerabilities and enhance preparedness for future events.

Government of India

The government of India as the principal donor for this project will provide the financial support to implement the project. The project will organize at least one monitoring visit for the Government of India to the selected countries to see the progress and achievement of countries within the life of the project. The Government of India will also provide substantive inputs in project delivery and through facilitation of the cooperation with countries.

### Regional and Local Plans

The project will comply and seek to support the implementation of international, regional and local frameworks, strategies and plans regarding climate and disaster resilient development in SIDS.

### a) Framework for Resilient Development in the Pacific: An integrated Approach to Address Climate Change and Disaster Risk Management (FRDP)

The FRDP succeeds the Pacific Disaster Risk Reduction and Disaster Management Framework for Action (commonly referred to as the Regional Framework for Action or RFA) and the Pacific Islands Framework for Action of Climate Change (PIFACC) which ended in 2016. It provides high level strategic guidance to different stakeholder groups on how to enhance resilience to climate change and disasters, in ways that contribute to and are embedded in sustainable development. The purpose of the FRDP is to guide stakeholders' actions to strengthen resilience in the region, amongst others, it provides:

- Guidance on coordinated and integrated priorities to be implemented at the regional, national and community levels that will contribute to resilient development outcomes, and
- A coordinated framework for adequate, sustainable and timely provision of support, including through finance, technology transfer and capacity building from developed countries and partners tailored to PICS needs and priorities identified by them.

### b) Inter-Governmental Panel on Climate Change (IPCC) Assessment Report.

The Inter-Governmental Panel on Climate Change (IPCC) 5th 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 vulnerability of SIDS to extreme weather hazards.

### c) Pacific Islands Meteorological Strategy (PIMS) 2012-2021.

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, 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.

### d) Sendai Framework for Disaster Risk Reduction.

The Sendal Framework for Disaster Risk Reduction (DRR) 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 risks 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". 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>6</sup>

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". 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);
- promote "mechanisms for disaster risk transfer and insurance, risk-sharing and retention and
  financial protection, as appropriate, for both public and private investment to reduce the financial
  impact of disasters on Governments and societies, in urban and rural areas" and "the integration of
  disaster risk reduction considerations and measures in financial and fiscal instruments" (part of
  Priority 3); 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)

The project is aligned to the United Nations Development Assistance Framework (UNDAF) for the Pacific Region 2013-2017 to support development priorities. It recognizes the diversity in the Pacific and its priority

<sup>6</sup> http://www.preventionweb.net/files/43291 sendaiframeworkfordrren.pdf

is to address interrelated development challenges by approaching them from different, but complimentary angles, result in gender equality advances; poverty reduction interventions and contribute to increasing the resilience of communities to the effects of climate change and disasters. The Project contributes to Outcome Area 1: Environmental management, climate change and disaster risk management, Outcome 1.1, which seeks to improve resilience capacity of PICs with focus on communities, through integrated implementation of sustainable environmental management, climate change adaptation/mitigation and disaster risk management.

### **Risks and Assumptions**

Below are key risks that are identified in the Risk Log (Annex 4);

### a) Natural Disasters in the Region

An impact of a natural disaster on the participating countries may result in delayed and perhaps no delivery of some project activities. Countries may be required to reprioritize these development activities to facilitate response and recovery. This reprioritization may not necessarily be in sync with the project outputs.

### b) Engagement and coordination among regional and national institution

Overall results and long-term sustainability of the Project will be affected if the project does not successfully communicate with stakeholders and build on existing strengths nationally and regionally.

### c) Availability of Equipment from Suppliers.

The unavailability of specialized equipment as required in this project from suppliers in the region (preferably NIWA) may affects the project timeline. It is important to note that the limited availability of suppliers will likely to contribute to the delay in project implementation.

### d) Staff Turn-over

There is a high chance of trained staff leaving current employment for better opportunities. This will affect the country's fragile technical capacity to deliver efficient climate and hydrological services and deprive the countries from the expertise developed through donor funded trainings and capacity development activities.

### Stakeholder Engagement

The primary target beneficiaries of the project are the National Meteorological and Hydrological Services. The project intends to support the provision of technical equipment and support training of hydrologists and meteorologists to enhance their capacity to monitor climate early warning and disseminate quality climate information. The stakeholder consultation process, which will take place at the beginning of the project, will be inclusive of marginalised and vulnerable groups such as women, youth and people with disabilities. Equal training opportunities for both men and women will be given to national meteorologist and hydrologist where appropriate.

The project will build on lessons learnt from past and existing projects in the region and will build synergies with the most relevant existing programs and leveraging proven practises to enhance the development outcome of this project.

| Continued to the project of the proj

### South-South and Triangular Cooperation (SSC/TrC)

The project is the first to be funded by the India-UN Fund, which is a fund supporting South-South Cooperation initiatives which enhance opportunities for the achievement of and the development priorities of targeted countries. The, Government of India will provide financial support and technology transfer through the training of hydrologists and meteorologists in India.

In terms of knowledge management, the project intends to develop knowledge products based on the lessons learnt and captured in toolkits and other products for use during training and exchange between countries. The regional media training is another platform where these knowledge products will be showcased and shared amongst national government media organisations.

### Knowledge

- a) Hydrologists and meteorologists training will increase technical capacity in country to report on climate and hydrological early warning.
- b) Development of Gender Inclusive Standard Communication Procedures for the country to disseminate climate and hydrological information.

### Sustainability and Scaling Up

Ensuring sustainability to the proposed investments will be a criterion 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 approval by the key national and regional stakeholders. The strategy will be based on the gap analysis and the 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 enhanced climate and disaster-resilient
  development.
- At the national level, the project will strengthen the capacities of the public sector by providing the stakeholders and beneficiaries with climate early warning, recovery mechanisms for improved disaster and climate risk resilience and coordination and integration of Climate Change and Disaster Risk Management (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 plans. 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 to strengthen the national and regional
  capacities to provide effective climate services, and enhance advocacy for mainstreaming of risk
  management for climate and disaster-resilient development planning, policies and programs.

### IV. PROJECT MANAGEMENT

### Cost Efficiency and Effectiveness

The project will build on the existing technical capacity within the UNDP Pacific Office and will be implemented in parallel with other existing projects. 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 platforms, such as the Pacific Solutions Exchange, and convening the 22-member Development Partners for Pacific Climate Change Forum. As mentioned before, the intention is to build synergies with the most relevant existing programs and leveraging proven practices to achieve the results of the project.

One relevant UNDP project to highlight is the Pacific Risk Resilience Programme (PRRP), which focuses on 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, 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).

### Complementarity with Existing Projects in the Region

In addition to outlining complementarity and synergies with UNDP PRRP (as outlined in the previous section), SPREP and WMO Climate Early Warning System (CLEWS) support, 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), and the Finnish-Pacific project (FINPAC).

Climate and Oceans Support Program in the Pacific (COSPPac), started in 2012, is a four-year programme funded by Australian Department of Foreign Affairs and Trade (DFAT) 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. The programme has some similar interests with the proposed project, including generating user-relevant information on climate risks.

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, aiming 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.

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, Samoa, 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. A relevant component is the Disaster Risk Financing, which could be leveraged for synergies.

### **Project Management**

The project will be directly implemented by the UNDP Pacific Office in Fiji under the Resilience and Sustainable Development Unit. A Project Manager will be responsible for the day-to-day implementation of the project under the guidance of the Project Board and with the support of the project team.

The project will complement existing projects implemented by UNDP and will seek to address gaps and lessons learnt from previous projects. The project staff will be responsible for all aspects of project implementation including financial management, monitoring and evaluation.

>

<sup>7</sup> UNDP publishes its project information (indicators, baselines, targets and results) to meet the International Aid Transparency Initiative (IATI) standards. Indicators are S.M.A.R.T. (Specific, Measurable, Attainable, Relevant and Time-bound), provide accurate baselines and targets underpinned by reliable evidence and data, and avoid acronyms so that external audience clearly understand the results of the project.

## Intended Outcome as stated in the UNDAF/Country [or Global/Regional] Programme Results and Resource Framework:

Regional Programme Document (2014-2017) Outcome 3: Countries are able to reduce the likelihood of conflict, and lower the risk of natural disasters

# Outcome indicators as stated in the Country Programme [or Global/Regional] Results and Resources Framework, including baseline and targets:

UNDP Strategic plan (2014-2017): Percentage of countries with disaster and climate risk management plans that are fully funded in national, local and sectorial development budgets

## Applicable Output(s) from the UNDP Strategic Plan:

UNDP Strategic plan (2014-2017):

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 manmade crisis at all levels of government and community.

Project title and Atlas Project Number: South- South Corporation: Strengthening Climate - Hydrology Early Warning Systems in selected PICS.

EXPECTED	OUTPUT INDICATORS <sup>8</sup>	DATA	BASE	BASELINE	TAR	SETS (by	frequen	cy of dat	TARGETS (by frequency of data collection)	on)	DATA COLLECTION
SOUPOIS		SOURCE	Value	Year	Year 1		Year Year 2 3	Year 4	Year FINAL	FINAL	METHODS & RISKS
Output 1											
meteorologist and hydrologist technicians in the selected 7 countries have	1.1 Number of meteorologists and hydrologists trained in seven countries (disaggregated by gender and age) and are capable to apply knowledge gained).	Training Report	0	2017	14 (2 per country )	N/A	N/A	N/A	N/A		Monitoring and Tracking Tool. Risks: political influence.

<sup>8</sup> It is recommended that projects use output indicators from the Strategic Plan IRRF, as relevant, in addition to project-specific results indicators. Indicators should be disaggregated by sex or for other targeted groups where relevant.

Monitoring and Tracking Tool. Risk: political influence.	Monitoring and Tracking Tool. Risk: political influence.	Monitoring and Tracking Tool. Risk: acquisition of land, vandalism, security of equipment, durability of equipment, availability of equipment.
N/A	N/A	
(regiona   ) Add target by country (knowle dge product s)	7	Q
2017	2017	2017
0	0	0
SCP	Training Report	Quarterly Report
1.3 Status of the Early Warning Climate and Hydrology Gender Inclusive Standard Communication Procedures (SCP) and Knowledge products endorsed	1.4 Number of media representatives trained (disaggregated by gender and age) and reporting on early warning preparedness planning and disaster recovery	<b>2.1</b> Number of countries with operational Rain Gauges in schools and agricultural stations.
improved capacities to better able credible data to inform early warning preparedness planning and disaster recovery.		Output 2  The 7 selected countries are better resourced with technology critical to the provision of credible data

Monitoring and Tracking Tool. Risk: acquisition of land, vandalism, security of equipment, durability of equipment, availability of equipment.	Monitoring and Tracking Tool. Risk: acquisition of land, vandalism, security of equipment, durability of equipment, availability of equipment.	Monitoring and Tracking Tool. Risk: acquisition of land, vandalism, security of equipment, durability of equipment, availability of equipment.
7	7	Н
2017	2017	2017
0	0	0
Quarterly Report	Quarterly Report	Quarterly Report
2.2 Number of countries with operational AWS- Meteorological Instruments providing timely and accurate data	2.3 Status of operational AWS- Hydrology instruments providing accurate data	2.4 Number of countries with operational Inline Salinity Meters Instruments.
for early warning preparedness planning and disaster recovery		

## VI. MONITORING AND EVALUATION

In accordance with UNDP's programming policies and procedures, the project will be monitored through the following monitoring and evaluation plans: [Note: monitoring and evaluation plans: [Note: monitoring] -and evaluation plans should be adapted to project context, as needed]\_

### **Monitoring Plan**

**************************************	The second secon		The state of the s		
Monitoring Activity	Purpose	Frequency	Expected Action	Partners (if joint)	Cost (if any)
and Advision of	Progress data against the results indicators	Monthly	Slower than expected progress	UNDP/Indian	Staff Time,
	in the RRF will be collected and analysed via		will be addressed by project	government/countries   Country	Country
Track results progress	a result tracker.		management.	India-UN Dupi	monitoring
				Partneschip Fund (inspections)	inspections (Travel Cost)
TO THE TAXABLE PARTY OF TAXABLE P	Identify specific risks that may threaten		Risks are identified by project	UNDP	TBC
	achievement of intended results. Identify		management and actions are		
	and monitor risk management actions using		taken to manage risk. The risk		E 4
Monitor ond Manager	a risk log. This includes monitoring		log is actively maintained to		
Mollitol allu Mallage	measures and plans that may have been	Quarterly	keep track of identified risks and		
KISK	required as per UNDP's Social and		actions taken.		
	Environmental Standards. Audits will be				
	conducted in accordance with UNDP's audit				
	policy to manage financial risk.				
	Knowledge, good practices and lessons will		Relevant lessons are centured	UNDP/Indian /	TBC
\$ 100 miles	be captured regularly, as well as actively	At least annually	by the project team and used to	government/countries	
רבקון	sourced from other projects and partners	לווססווואס אלוויסמווא	inform management decisions	7	
	and integrated back into the project.		וווסוווו וומומצבווובוור מברוזוסווז.	A CONTRACTOR OF THE CONTRACTOR	
	The quality of the project will be assessed		Areas of strength and weakness	UNDP/Indian /	TBC
To Control of the Con	against UNDP's quality standards to identify		will be reviewed by project	government/countries	
Ailliuai riojett	project strengths and weaknesses and to	Annually	management and used to	·	
Quality Assurance	inform management decision making to		inform decisions to improve		
	improve the project.		project performance.		
***************************************	The state of the s				

Within reasonable timetrames and Frequency additional progress updates may be requested from the project team.

Review and Make Course Corrections	Internal review of data and evidence from all monitoring actions to inform decision making.	At least annually	Performance data, risks, lessons and quality will be discussed by the project board and used to make course corrections.	UNDP	TBC
Project Report	A progress report will be presented to the Project Board and key stakeholders, consisting of progress data showing the results achieved against pre-defined annual targets at the output level, the annual project quality rating summary, an updated risk long with mitigation measures, and any evaluation or review reports prepared over the period.	Every 6 months Annually, and at the end of the project (final report)	Potential course correction.	UNDP, Subanted	TBC
Project Review (Project Board)	The project's governance mechanism (i.e., project board) will hold 1 project reviews to assess the performance of the project and review the Work Plan to ensure realistic budgeting over the life of the project. In the project's final year, the Project Board shall hold an end-of project review to capture lessons learned and discuss opportunities for scaling up and to share project results and lessons learned with relevant audiences.	Every 6 profils Specifyfreguency (lie, attesst	Any quality concerns or slower than expected progress should be discussed by the project board and management actions agreed to address the issues identified.	UNDP/Indian government/countries India-UN Dupt Puship Fund Secretariof and Secretariof	TBC
1					

the India-UN Dupt. Pship.
Find Board of Directors
will also exercise prefect
oversight Enctions reviewing
propress and challepes, and
where applicable approving

20

revisions.

Evaluation Title	Partners (if joint)	Related Strategic Plan Output	UNDAF/CPD Outcome	Planned Completion Date	Key Evaluation Stakeholders	Cost and Source of Funding
		Output 1.2 (SRPD 2018- 2022)	CGGO) toward		Government	Project cost
e.g., Mid-Term Evaluation	n/a	Output 3.1 & 3.2 (UNDP Pacific 2013-2017)	2018-2022)	February	Departments of the seven countries	\$18,000

21

<sup>9</sup> Optional, if needed

### 22

### VII. MULTI-YEAR WORK PLAN 1011

All anticipated programmatic and operational costs to support the project, including development effectiveness and implementation support arrangements, need to be human resources, procurement, finance, audit, policy advisory, quality assurance, reporting, management, etc. All services which are directly related to the project need to identified, estimated and fully costed in the project budget under the relevant output(s). This includes activities that directly support the project, such as communication, be disclosed transparently in the project document.

EXPECTED OUTPUTS	PLANNED ACTIVITIES	<u>d</u>	lanned Bu	Planned Budget by Year	ar		d	PLANNED BUDGET	JGET
		Q1	Q2	03	Q4	RESPONSIBLE PARTY	Funding Source	Budget Descripti on	Amount
Output 1	1.1 Regional training for							DSA	127,000
National metereologist and	meteorologists and		×	×	×	UNDP	India	Tickets	
hydrologist technicians in the selected 7 countries have improved	hydrologists in Pune, India.							Accomm odation	
capacities to better able provide								Travel	
preparedness planning and disaster								DSA	
recovery.								Printing	80,000
Cook Islands, Federated States of	1.2 Regional workshop to							Comms	
Micronesia, Kiribati, Nauru, Republic	develop Standard			>				materials	
of Marshall Islands, Solomon Islands and Tonga	iication P a organizati			×			e C C	Comms equipme nt (camera, voice recorder)	

10 Cost definitions and classifications for programme and development effectiveness costs to be charged to the project are defined in the Executive Board decision DP/2010/32

In other cases, the UNDP programme manager alone may sign the revision provided the other signatories have no objection. This procedure may be applied for example when the purpose 11 Changes to a project budget affecting the scope (outputs), completion date, or total estimated project costs require a formal budget revision that must be signed by the project board. of the revision is only to re-phase activities among years.

	1.3 Conduct evaluation incl. gender analysis on the impact of project.			×	ار			10,000
	1.4: Knowledge Management Development of knowledge products produced from lessons learnt and captured in toolkits and other knowledge products for use during training and exchange between countries			×			Printing Comms Products	10,000
	MONITORING	×				India	Travel, dsa	10,000
	Sub-Total for Output 1							237,000
Output 2  The 7 selected countries are better	2.1 Purchase and install Rain Gauges for Schools and agricultural stations		×	×		India		13,000
the provision of credible data for early warning preparedness planning	2.2 Purchase and install of AWS-Meteorological Instrument		×	X		India		105,000
Federated States of Micronesia, Kiribati, Nauru, Republic of Marshall Islands. Solomon Islands and Tonga	2.3 Purchase and install of AWS-hydrological Instruments		×	X		India		386,000
	2.4 purchase and install of inline salinity meters.		×	×		India		100,000
	MONITORING		×			India	Travel, DSA	10,000
	Sub-Total for Output 2							614,000
Output 3 Project Management	Project Management	×	×	×				57,000

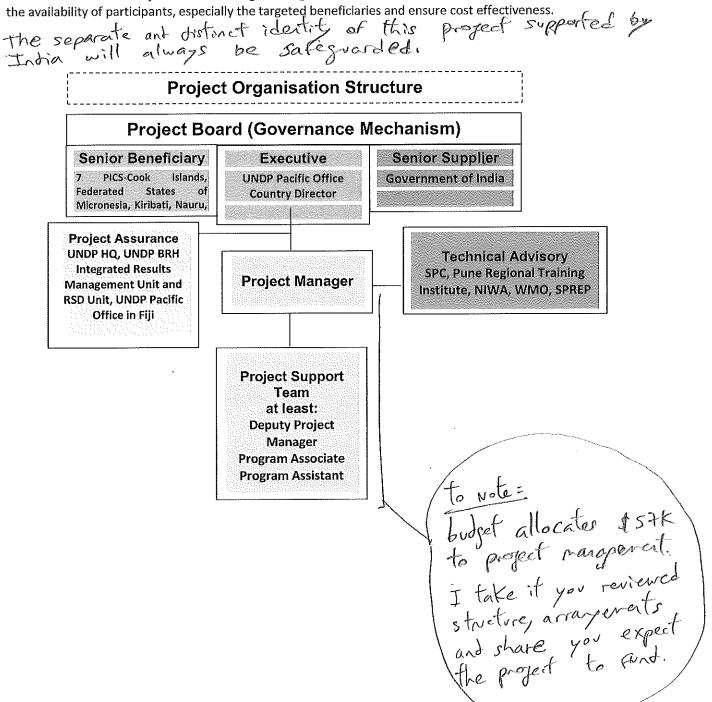
General Management Support (\$%)  General Management Support (\$%)  Sub-Total for Output 3  TOTAL  TOTAL  Per UNDP Executive Board decision DP/2013/9  PREPARED FIRST FOR Executive Board decision DP/2013/9  PREPARED FOR SUPPLY SOUTH COOPERATES  Applies (equal to this of the supplies)		Project Coordinator					<u> </u>	
Sub-Total for Output 3  Per UNDP Executive Board decision DP/2013/9  Applies (equal to India's cost-shary rate (2.3.2%).	evaluation (as relevant)	EVALUATION				India	JC	18,000
Replies (equal to India's cost-sharifully applies)	Seneral Management Support (4%	(9)						74,000
Per UNDP Executive Board decision DP/2013/9 preparation STIS rate for South-South cooperation applies (equal to India's cost-shary rate @ 3 %).		Sub-Total for Output 3						149,000
	COTAL							1,000,000
			Executive STIS 13 (Cequal	Board to the total	deusier D 5-4-50-4 ias cost	2008 600 p	t t	, al

You can re-allocate the difference, includiggly heassay through Direct project costing.

I thouse a referred to the "in that" recourse you test in cover page to orthing how the build of this duptility duptil

The project will be managed by a project board consisting of National Met directors from the seven countries as the senior beneficiaries of the project, UNDP Pacific Country Director in Fiji as the Chairperson and a representative from the government of India. The project will receive technical advice from The Secretariat of Pacific Community (SPC), Pune Regional Training Institute, NIWA, SPREP and World Meteorological Office.

Since the project will be running concurrently with other projects, implementing related activities, e.g. Russian funded Disaster Resilience for Pacific SIDs (RESPAC) Project, the project management team will ensure that all annual Project Board meetings are organized in consultation with these projects to maximise the availability of participants, especially the targeted beneficiaries and ensure cost effectiveness.



### IX. LEGAL CONTEXT AND RISK MANAGEMENT

### **LEGAL CONTEXT STANDARD CLAUSES**

### Option a. Where the country has signed the Standard Basic Assistance Agreement (SBAA)

This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the Government of (country) and UNDP, signed on (date). All references in the SBAA to "Executing Agency" shall be deemed to refer to "Implementing Partner."

### Option b. Where the country has NOT signed the Standard Basic Assistance Agreement (SBAA)

The project document shall be the instrument envisaged and defined in the <u>Supplemental Provisions</u> to the Project Document, attached hereto and forming an integral part hereof, as "the Project Document".

### Option c. For Global and Regional Projects

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 SBAAs for the specific countries; or (ii) in the <u>Supplemental Provisions</u> 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.

### **RISK MANAGEMENT STANDARD CLAUSES**

### UNDP (DIM)

- 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]<sup>12</sup> [UNDP funds received pursuant to the Project Document]<sup>13</sup> 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 <a href="https://www.un.org/sc/committees/1267/ag\_sanctions\_list.shtml">https://www.un.org/sc/committees/1267/ag\_sanctions\_list.shtml</a>. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.
- 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).

<sup>12</sup> To be used where UNDP is the Implementing Partner

<sup>&</sup>lt;sup>13</sup> To be used where the UN, a UN fund/programme or a specialized agency is the Implementing Partner

- 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.

### X. ANNEXES

- 1. Theory of Change Diagram
- 2. Project Quality Assurance Report
- 3. Social and Environmental Screening Template
- 4. Risk Analysis.
- 5. Project Board Terms of Reference and TORs of key management positions.

climate variability

and disasters;

climate change,

the impacts of

2022, people and

ecosystems in the Pacific are

**OUTCOME 1:By** 

more resilient to

SRPD 2018-2022

environmental

and

protection is strengthened

SOLUTION

## NOT SELECTED SOLUTION PATHWAY

hance disaster
edness, response
I recovery risk
rhance, recovery
ty, community and
sector involvement

engthening Early ing/Disaster Risk man Resources acities of National brology, Hydrology, Media, Schools and munities in 7 PIC, Kiribati, FSM, RMI, SOI, Cook Islands)

engthening Early ning/Disaster Risk nical Capacities of al Meteorology and gy Services in 7 PIC y, Kiribati, FSM, RMI, SOI, Cook Islands

Invest in resilient housing or longer-term rehabilitation and reconstruction

Preparedness and planning mechanisms and tools to manage disaster recovery processes strengthened at regional, national and local level;

Financial Instruments to Manage Disaster related risks and post recovery efforts Community Preparedness Plans

Post Disaster Needs Assessment

OUTPUT: By
end of 2018, 7
countries have
benefitted from
South to South
Cooperation in
Human and
technical
capacities on
Climate and
Hydrology Early
warning system

### PROJECT QA ASSESSMENT: DESIGN AND APPRAISAL

### **OVERALL PROJECT**

EXEMPLARY (5)  @@@@@	HIGHLY SATISFACTORY (4)	Satisfactory (3)	Needs Improvement (2)  ®®OOO	INADEQUATE (1)
At least four criteria are rated Exemplary, and all criteria are rated High or Exemplary.	All criteria are rated Satisfactory or higher, and at least four criteria are rated High or Exemplary.	At least six criteria are rated Satisfactory or higher, and only one may be rated Needs Improvement. The SES criterion must be rated Satisfactory or above.	At least three criteria are rated Satisfactory or higher, and only four criteria may be rated Needs Improvement.	One or more criteria are rated Inadequate, or five or more criteria are rated Needs Improvement.

### **DECISION**

- APPROVE the project is of sufficient quality to continue as planned. Any management actions must be addressed in a timely
- APPROVE WITH QUALIFICATIONS the project has issues that must be addressed before the project document can be approved. Any management actions must be addressed in a timely manner.
- **DISAPPROVE** the project has significant issues that should prevent the project from being approved as drafted.

### **RATING CRITERIA**

STRATEGIC	
1. Does the project's Theory of Change specify how it will contribute to higher level change? (Select the option from 1-3 that best reflects the project):	3 2 1
<ul> <li>3: The project has a theory of change with explicit assumptions and clear change pathway describing how the project will contribute to outcome level change as specified in the programme/CPD, backed by credible evidence of what works effectively in this context. The project document clearly describes why the project's strategy is the best approach at this point in time.</li> <li>2: The project has a theory of change. It has an explicit change pathway that explains how the project intends to contribute to outcome-level change and why the project strategy is the best approach at this point in time, but is backed by limited evidence.</li> </ul>	Evidence Refer to Project Document Annex 1, page 2 on Developm
<ul> <li>1: The project does not have a theory of change, but the project document may describe in generic terms how the project will contribute to development results, without specifying the key assumptions. It does not make an explicit link to the programme/CPD's theory of change.</li> <li>*Note: Management Action or strong management justification must be given for a score of 1</li> </ul>	ent Challenge and 3-4 on Strategy
2. Is the project aligned with the thematic focus of the UNDP Strategic Plan? (select the option from 1-3 that best reflects the project):	3 2
• 3: The project responds to one of the three areas of development work <sup>1</sup> as specified in the Strategic Plan; it addresses at least one of the proposed new and emerging areas <sup>2</sup> ; an issues-based analysis has been incorporated into the project design; and the project's RRF includes all the relevant SP output indicators. (all must be true to select this option)	Evidence Refer to the Strategy
<ul> <li>2: The project responds to one of the three areas of development work<sup>1</sup> as specified in the Strategic Plan. The project's RRF includes at least one SP output indicator, if relevant. (both must be true to select this option)</li> <li>1: While the project may respond to one of the three areas of development work<sup>1</sup> as specified in the Strategic Plan, it is based on a sectoral approach without addressing the complexity of the development issue. None of the relevant SP indicators are included in the RRF. This answer is also selected if the project does not respond to any of the three areas of development work in the Strategic Plan.</li> </ul>	and RRF (page 15- 16)

<sup>&</sup>lt;sup>1</sup> 1. Sustainable development pathways; 2. Inclusive and effective democratic governance; 3. Resilience building

<sup>&</sup>lt;sup>2</sup> sustainable production technologies, access to modern energy services and energy efficiency, natural resources management, extractive industries, urbanization, citizen security, social protection, and risk management for resilience

RELEVANT	
3. Does the project have strategies to effectively identify, engage and ensure the meaningful participation of targeted groups/geographic areas with a priority focus on the excluded and marginalized? (select the option from 1-3 that	3 2
<ul> <li>best reflects this project): <ul> <li>3: The target groups/geographic areas are appropriately specified, prioritising the excluded and/or marginalised. Beneficiaries will be identified through a rigorous process based on evidence (if applicable.)The project has an explicit strategy to identify, engage and ensure the meaningful participation of specified target groups/geographic areas throughout the project, including through monitoring and decision-making (such as representation on the project board) (all must be true to select this option)</li> <li>2: The target groups/geographic areas are appropriately specified, prioritising the excluded and/or marginalised. The project document states how beneficiaries will be identified, engaged and how meaningful participation will be ensured throughout the project. (both must be true to select this option)</li> <li>1: The target groups/geographic areas are not specified, or do not prioritize excluded and/or marginalised populations. The project does not have a written strategy to identify or engage or ensure the meaningful participation of the target groups/geographic areas throughout the project.</li> </ul> </li> <li>*Note: Management Action must be taken for a score of 1, or select not applicable.</li> </ul>	Evidence Refer to Strategy (pg 4) and Stakehold er engageme nt page 11
<ul> <li>4. Have knowledge, good practices, and past lessons learned of UNDP and others informed the project design? (select the option from 1-3 that best reflects this project): <ul> <li>3: Knowledge and lessons learned (gained e.g. through peer assist sessions) backed by credible evidence from evaluation, corporate policies/strategies, and monitoring have been explicitly used, with appropriate referencing, to develop the project's theory of change and justify the approach used by the project over alternatives.</li> <li>2: The project design mentions knowledge and lessons learned backed by evidence/sources, which inform the project's theory of change but have not been used/are not sufficient to justify the approach selected over alternatives.</li> <li>1: There is only scant or no mention of knowledge and lessons learned informing the project design. Any references that are made are not backed by evidence.</li> </ul> </li> </ul>	3 2 1 Evidence Refer to Developm ent Challenge page 2-3
<ul> <li>5. Does the project use gender analysis in the project design and does the project respond to this gender analysis with concrete measures to address gender inequities and empower women? (select the option from 1-3 that best reflects this project):         <ul> <li>3: A participatory gender analysis on the project has been conducted. This analysis reflects on the different needs, roles and access to/control over resources of women and men, and it is fully integrated into the project document. The project establishes concrete priorities to address gender inequalities in its strategy. The results framework includes outputs and activities that specifically respond to this gender analysis, with indicators that measure and monitor results contributing to gender equality. (all must be true to select this option)</li> <li>2: A gender analysis on the project has been conducted. This analysis reflects on the different needs, roles and access to/control over resources of women and men. Gender concerns are integrated in the development challenge and strategy sections of the project document. The results framework includes outputs and activities that specifically respond to this gender analysis, with indicators that measure and monitor results contributing to gender equality. (all must be true to select this option)</li> <li>1: The project design may or may not mention information and/or data on the differential impact of the project's development situation on gender relations, women and men, but the constraints have not been clearly identified and interventions have not been considered.</li> </ul> </li> <li>*Note: Management Action or strong management justification must be given for a score of 1</li> </ul>	3 2  Evidence Thou there has not been any gender analysis conducted to inform the design of this project, however the project is designed with outputs to be
	disaggrega ted by sex and age and a gender

<ul> <li>6. Does UNDP have a clear advantage to engage in the role envisioned by the project vis-à-vis national partners, other development partners, and other actors? (select from options 1-3 that best reflects this project): <ul> <li>3: An analysis has been conducted on the role of other partners in the area where the project intends to work, and credible evidence supports the proposed engagement of UNDP and partners through the project. It is clear how results achieved by relevant partners will contribute to outcome level change complementing the project's intended results. If relevant, options for south-south and triangular cooperation have been considered, as appropriate. (all must be true to select this option)</li> <li>2: Some analysis has been conducted on the role of other partners where the project intends to work, and relatively limited evidence supports the proposed engagement of and division of labour between UNDP and partners through the project. Options for south-south and triangular cooperation may not have not been fully developed during project design, even if relevant opportunities have been identified.</li> <li>1: No clear analysis has been conducted on the role of other partners in the area that the project intends to work, and relatively limited evidence supports the proposed engagement of UNDP and partners through the project. There is risk that the project overlaps and/or does not coordinate with partners' interventions in this area. Options for south-south and triangular cooperation have not been considered, despite its potential relevance.</li> </ul> </li> <li>*Note: Management Action or strong management justification must be given for a score of 1</li> </ul>	an ac (refe RF 3 Evid Refe Stra	RF) 2 L ence er to tegy ge 4 nd eershi
SOCIAL & ENVIRONMENTAL STANDARDS	1	
7. Does the project seek to further the realization of human rights using a human rights based approach? (select from	3	2
<ul> <li>options 1-3 that best reflects this project):</li> <li>3: Credible evidence that the project aims to further the realization of human rights, upholding the relevant international and national laws and standards in the area of the project. Any potential adverse impacts on enjoyment of human rights were rigorously identified and assessed as relevant, with appropriate mitigation and management measures incorporated into project design and budget. (all must be true to select this option)</li> <li>2: Some evidence that the project aims to further the realization of human rights. Potential adverse impacts on enjoyment of human rights were identified and assessed as relevant, and appropriate mitigation and management measures incorporated into the project design and budget.</li> <li>1: No evidence that the project aims to further the realization of human rights. Limited or no evidence that potential adverse impacts on enjoyment of human rights were considered.</li> </ul>	Evido Refe SE Ann	er to SP
*Note: Management action or strong management justification must be given for a score of 1		
<ul> <li>8. Did the project consider potential environmental opportunities and adverse impacts, applying a precautionary approach? (select from options 1-3 that best reflects this project): <ul> <li>3: Credible evidence that opportunities to enhance environmental sustainability and integrate poverty-environment linkages were fully considered as relevant, and integrated in project strategy and design. Credible evidence that potential adverse environmental impacts have been identified and rigorously assessed with appropriate management and mitigation measures incorporated into project design and budget. (all must be true to select this option).</li> <li>2: No evidence that opportunities to strengthen environmental sustainability and poverty-environment linkages were considered. Credible evidence that potential adverse environmental impacts have been identified and assessed, if relevant, and appropriate management and mitigation measures incorporated into project design and budget.</li> <li>1: No evidence that opportunities to strengthen environmental sustainability and poverty-environment linkages were considered. Limited or no evidence that potential adverse environmental impacts were adequately considered.</li> </ul> </li> <li>*Note: Management action or strong management justification must be given for a score of 1</li> </ul>	3 This incorped in (Ann Discusion Climproo o techny 2. W	was porat SESP lex). ssion 1. late fing follog Vaste osal
9. Has the Social and Environmental Screening Procedure (SESP) been conducted to identify potential social and environmental impacts and risks? The SESP is not required for projects in which UNDP is Administrative Agent only and/or projects comprised solely of reports, coordination of events, trainings, workshops, meetings, conferences and/or	Yes SESP Requ	

communication materials and information dissemination. [if yes, upload the completed checklist. If SESP is not required, provide the reason for the exemption in the evidence section.] MANAGEMENT & MONITORING 2 3 10. Does the project have a strong results framework? (select from options 1-3 that best reflects this project): 3: The project's selection of outputs and activities are at an appropriate level and relate in a clear way to the Evidence project's theory of change. Outputs are accompanied by SMART, results-oriented indicators that measure all of **RRF** was the key expected changes identified in the theory of change, each with credible data sources, and populated designed baselines and targets, including gender sensitive, sex-disaggregated indicators where appropriate. (all must be per the true to select this option) TOC (refer 2: The project's selection of outputs and activities are at an appropriate level, but may not cover all aspects of the to page project's theory of change. Outputs are accompanied by SMART, results-oriented indicators, but baselines, 14-16) targets and data sources may not yet be fully specified. Some use of gender sensitive, sex-disaggregated indicators, as appropriate. (all must be true to select this option) 1: The results framework does not meet all of the conditions specified in selection "2" above. This includes: the project's selection of outputs and activities are not at an appropriate level and do not relate in a clear way to the project's theory of change; outputs are not accompanied by SMART, results-oriented indicators that measure the expected change, and have not been populated with baselines and targets; data sources are not specified, and/or no gender sensitive, sex-disaggregation of indicators. \*Note: Management Action or strong management justification must be given for a score of 1 11. Is there a comprehensive and costed M&E plan in place with specified data collection sources and methods to Yes No (3)(1) support evidence-based management, monitoring and evaluation of the project? 2 12. Is the project's governance mechanism clearly defined in the project document, including planned composition of the project board? (select from options 1-3 that best reflects this project): Evidence 3: The project's governance mechanism is fully defined in the project composition. Individuals have been specified for each position in the governance mechanism (especially all members of the project board.) Project Refer to Board members have agreed on their roles and responsibilities as specified in the terms of reference. The ToR of Governanc the project board has been attached to the project document. (all must be true to select this option). Structure 2: The project's governance mechanism is defined in the project document; specific institutions are noted as 22 holding key governance roles, but individuals may not have been specified yet. The prodoc lists the most important responsibilities of the project board, project director/manager and quality assurance roles. (all must be true to select this option) 1: The project's governance mechanism is loosely defined in the project document, only mentioning key roles that will need to be filled at a later date. No information on the responsibilities of key positions in the governance mechanism is provided. \*Note: Management Action or strong management justification must be given for a score of f 12 13. Have the project risks been identified with clear plans stated to manage and mitigate each risks? (select from options 1-3 that best reflects this project): Evidence 3: Project risks related to the achievement of results are fully described in the project risk log, based on Refer to comprehensive analysis drawing on the theory of change, Social and Environmental Standards and screening, Risk Log situation analysis, capacity assessments and other analysis. Clear and complete plan in place to manage and mitigate each risk. (both must be true to select this option) 2: Project risks related to the achievement of results identified in the initial project risk log with mitigation measures identified for each risk. 1: Some risks may be identified in the initial project risk log, but no evidence of analysis and no clear risk mitigation measures identified. This option is also selected if risks are not clearly identified and no initial risk log is included with the project document. \*Note: Management Action must be taken for a score of 1 EFFICIENT

14. Have specific measures for ensuring cost-efficient use of resources been explicitly mentioned as part of the project design? This can include: i) using the theory of change analysis to explore different options of achieving the maximum results with the resources available; ii) using a portfolio management approach to improve cost effectiveness through synergies with other interventions; iii) through joint operations (e.g., monitoring or procurement) with other partners.	Yes (3)	No (1)
15. Are explicit plans in place to ensure the project links up with other relevant on-going projects and initiatives, whether led by UNDP, national or other partners, to achieve more efficient results (including, for example, through sharing resources or coordinating delivery?)	Yes (3)	No (1)
16. Is the budget justified and supported with valid estimates?	3	2
<ul> <li>3: The project's budget is at the activity level with funding sources, and is specified for the duration of the project period in a multi-year budget. Costs are supported with valid estimates using benchmarks from similar projects or activities. Cost implications from inflation and foreign exchange exposure have been estimated and incorporated in the budget.</li> <li>2: The project's budget is at the activity level with funding sources, when possible, and is specified for the duration of the project in a multi-year budget. Costs are supported with valid estimates based on prevailing rates.</li> <li>1: The project's budget is not specified at the activity level, and/or may not be captured in a multi-year budget.</li> </ul>	Evide Refe work Page 2:	ence r to plan 20- I
17. Is the Country Office fully recovering the costs involved with project implementation?	<u>3</u>	2
<ul> <li>3: The budget fully covers all project costs that are attributable to the project, including programme management and development effectiveness services related to strategic country programme planning, quality assurance, pipeline development, policy advocacy services, finance, procurement, human resources, administration, issuance of contracts, security, travel, assets, general services, information and communications based on full costing in accordance with prevailing UNDP policies (i.e., UPL, LPL.)</li> <li>2: The budget covers significant project costs that are attributable to the project based on prevailing UNDP policies (i.e., UPL, LPL.) as relevant.</li> <li>1: The budget does not adequately cover project costs that are attributable to the project, and UNDP is cross-subsidizing the project.</li> <li>*Note: Management Action must be given for a score of 1. The budget must be revised to fully reflect the costs of implementation before the project commences.</li> </ul>	Evide DP( incorp ed in activ	ence C is corat the vity
EFFECTIVE		
<ul> <li>18. Is the chosen implementation modality most appropriate? (select from options 1-3 that best reflects this project): <ul> <li>3: The required implementing partner assessments (capacity assessment, HACT micro assessment) have been conducted, and there is evidence that options for implementation modalities have been thoroughly considered. There is a strong justification for choosing the selected modality, based on the development context. (both must be true to select this option)</li> <li>2: The required implementing partner assessments (capacity assessment, HACT micro assessment) have been conducted and the implementation modality chosen is consistent with the results of the assessments.</li> <li>1: The required assessments have not been conducted, but there may be evidence that options for implementation modalities have been considered.</li> </ul> </li> <li>*Note: Management Action or strong management justification must be given for a score of 1</li> </ul>	nt fo selvent count it is r that proje a D mod	ence PAC acity ssme r the ven cted tries. noted this ect is pilM lality
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19. Have targeted groups, prioritizing marginalized and excluded populations that will be affected by the project, been engaged in the design of the project in a way that addresses any underlying causes of exclusion and discrimination?		ence	
<ul> <li>3: Credible evidence that all targeted groups, prioritising marginalized and excluded populations that will be involved in or affected by the project, have been actively engaged in the design of the project. Their views, rights and any constraints have been analysed and incorporated into the root cause analysis of the theory of change which seeks to address any underlying causes of exclusion and discrimination and the selection of project interventions.</li> </ul>		(2) Refer to Stakehold er Engageme nt page 12	
<ul> <li>2: Some evidence that key targeted groups, prioritising marginalized and excluded populations that will be involved in the project, have been engaged in the design of the project. Some evidence that their views, rights and any constraints have been analysed and incorporated into the root cause analysis of the theory of change and the selection of project interventions.</li> <li>1: No evidence of engagement with marginalized and excluded populations that will be involved in the project during project design. No evidence that the views, rights and constraints of populations have been incorporated into the project.</li> </ul>	and the second s		
20. Does the project conduct regular monitoring activities, have explicit plans for evaluation, and include other lesson learning (e.g. through After Action Reviews or Lessons Learned Workshops), timed to inform course corrections if needed during project implementation? This is integrated under Monitoring Plan and also part of the consultation and evaluation process planned for February 2018	Yes (3)	No (1)	
1. The gender marker for all project outputs are scored at GEN2 or GEN3, indicating that gender has been fully nainstreamed into all project outputs at a minimum.	Yes (3)	No (1)	
*Note: Management Action or strong management justification must be given for a score of "no". GEN 1 – This is mainstreamed at the Output Indicator and Activity level.		ence	
2. Is there a realistic multi-year work plan and budget to ensure outputs are delivered on time and within allotted resources? (select from options 1-3 that best reflects this project):	3		
• 3: The project has a realistic work plan & budget covering the duration of the project at the activity level to ensure outputs are delivered on time and within the allotted resources.	Evide		
<ul> <li>2: The project has a work plan &amp; budget covering the duration of the project at the output level.</li> <li>1: The project does not yet have a work plan &amp; budget covering the duration of the project.</li> </ul>		This is an annual funding project as per	
SUSTAINABILITY & NATIONAL OWNERSHIP	work	plan	
3. Have national partners led, or proactively engaged in, the design of the project? (select from options 1-3 that best reflects this project):	3	2	
<ul> <li>3: National partners have full ownership of the project and led the process of the development of the project jointly with UNDP.</li> </ul>	Evidence Refer to		
<ul> <li><u>2:</u> The project has been developed by UNDP in close consultation with national partners.</li> <li><u>1:</u> The project has been developed by UNDP with limited or no engagement with national partners.</li> </ul>	Project Document page 12		
1. Are key institutions and systems identified, and is there a strategy for strengthening specific/ comprehensive capacities based on capacity assessments conducted? (select from options 0-4 that best reflects this project):	3 2	2.5 1.5	
3: The project has a comprehensive strategy for strengthening specific capacities of national institutions based on a systematic and detailed capacity assessment that has been completed. This strategy includes an approach to regularly monitor national capacities using clear indicators and rigorous methods of data collection, and adjust the strategy to strengthen national capacities accordingly.	Evide (3) T hum	he	
<ul> <li>2.5: A capacity assessment has been completed. The project document has identified activities that will be undertaken to strengthen capacity of national institutions, but these activities are not part of a comprehensive strategy to monitor and strengthen national capacities.</li> </ul>	resou train and	ing d	
2: A capacity assessment is planned after the start of the project. There are plans to develop a strategy to strengthen specific capacities of national institutions based on the results of the capacity assessment.	technical equipmer t needs based on		

<ul> <li>1.5: There is mention in the project document of capacities of national institutions to be strengthened through the project, but no capacity assessments or specific strategy development are planned.</li> <li>1: Capacity assessments have not been carried out and are not foreseen. There is no strategy for strengthening specific capacities of national institutions.</li> </ul>	nation capa assessint rej infor the do of t	scity ssme ports med esign his
25. Is there is a clear strategy embedded in the project specifying how the project will use national systems (i.e., procurement, monitoring, evaluations, etc.,) to the extent possible? This is a DIM modality project.	Yes (3)	No (1)
26. Is there a clear transition arrangement/ phase-out plan developed with key stakeholders in order to sustain or scale up results (including resource mobilisation strategy)? Refer to Page 12.	Yes (3)	No (1)

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## Annex [#]. Social and Environmental Screening Template

The completed template, which constitutes the Social and Environmental Screening Report, must be included as an annex to the Project Document. Please refer to the Social and Environmental Screening Procedure and Toolkit for guidance on how to answer the 6 questions.

### Project Information

Pre	yect Information	
4	Project Title	South to South Cooperation: Strengthening Climate and Hydrology Early Warning Systems for seven PICs
2.	Project Number	
w.	Location (Global/Region/Country)	Country (Tonga, SOI, Kiribati, RMI, FSM, Nauru and Cook Islands)

# Part A. Integrating Overarching Principles to Strengthen Social and Environmental Sustainability

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QUESTION 1: How Does th
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Briefly describe in the space below how the Project mainstreams the human-rights based approach

This project will ensure that basic human rights are not compromised in terms of access to information and survival.

Briefly describe in the space below how the Project is likely to improve gender equality and women's empowerment

impact of the project on gender. Output 1 of the project target to further enhance gender inclusive with a establishment of a gender inclusive standard communication procedure This project will provide a fair capacity building opportunity for both women and men of all selected PICs. A gender analysis is also envisioned to be conducted assessing the for climate and hydrology early warning systems in selected PICs.

## Briefly describe in the space below how the Project mainstreams environmental sustainability

This project strongly supports the environmental friendly technology for climate and hydrology early warning systems. This will be ensured through the specifications of the technology to be procured such as durability and disposal.

## Part B. Identifying and Managing Social and Environmental Risks

QUESTION 2: What are the Potential	QUESTION 3	: What is the	N 3: What is the level of significance of the	QUESTION 6: What social and environmental
Social and Environmental Risks? Note: Describe briefly potential social	potential so	<b>cial and envirc</b> d to Questions 4	potential social and environmental risks? Note: Respond to Questions 4 and 5 below before proceeding	assessment and management measures have been conducted and/or are required to address potential
and environmental risks identified in Attachment 1 – Risk Screening Checklist (based on any "Yes" responses). If no risks have been identified in Attachment 1 then note "No Risks Identified" and skip to Question 4 and Select "Low Risk". Questions 5 and 6 not required for Low Risk Projects.	to Question 6			risks (for Risks with Moderate and High Significance)?
Risk Description	Impact and Probability (1-5)	Significance (Low, Moderate, High)	Comments	Description of assessment and management measures as reflected in the Project design. If ESIA or SESA is required note that the assessment should consider all potential impacts and risks.
Risk 2: Lack of engagement and coordination among regional and national institutions	1=2 P=2	and a	Thou this is moderate; however, it can be a significant social risk if not full buy-in is achieved	The regional and national framework strengthens the coordination of the engagement of these regional and national institutions. These framework forms the basis of this project intervention with limited environmental risk as compared to social risk.
Risk 3: High Staff Turnover	— = 2 ₽ = 3	-1	This is a social risk with moderate significance due to its impact. The high turnover of trained staff may impact the achievement of the projects outputs.	The Training Need Analysis from the selected countries are in place informing training requirements for climate and hydrology early warning systems. This is also part of the career succession plan for staff to be trained.
Risk 4: Non-Climate Proof Technology to suit Atolls environmental condition	N= 3	Σ	This is an environmental risk with high significance due to its impact. If equipments are not climate proof, then potential corrosion impact would need to be considered in the specification. Waste management disposal will be considered in terms of reusable and recycling approaches.	Procurement Plan for technology will strictly consider the environmental and social impacts. i.e. specifications.
[add additional rows as needed]				

QUESTION 4: What is the	ON 4: What is the overall Project risk categorization?	tion?
Select one (see	Select one (see SESP for guidance)	Comments
	Low Risk	This projects intends to support environmental and social management.
	Moderate Risk	The state of the s
THE PROPERTY CONTRACTOR OF THE PROPERTY CONTRACT	High Risk	AND
QUESTION 5: Based on the	ON 5: Based on the identified risks and risk	
categorization, what requirelevant?	ization, what requirements of the SES are !?	
Check	Check all that apply	Comments
Principle 1: Human Rights		Project supports the full rights to access of information for the main number of increasing survival in any natural disaster
	)	event
Principle 2: Gender Equality and Women's	and Women's	Training of staff and policy development will be gender
Empowerment		inclusive as stated in the project's output indicators
1. Biodiversity Conservation and Natural Resource	and Natural Resource	Equipments to be procured will be environmentally friendly
Management		and cost effective
2. Climate Change Mitigation and Adaptation	on and Adaptation	Equipment's specification will consider climate proofing for the main purpose of durability
3. Community Health, Safet	munity Health, Safety and Working Conditions	Equipments to be procured will be environmentally friendly and cost effective
4. Cultural Heritage		Selected sites for installation will consider cultural significance
5. Displacement and Resettlement	lement $\square$	The second secon
6. Indigenous Peoples	: 33	This project will work with indigenous communities of the selected PICs
7. Pollution Prevention and Resource Efficiency	Resource Efficiency	Equipments to be procured will be environmentally friendly and cost effective

### Final Sign Off

QA Approver	UNDP senior manager, typically the UNDP Deputy Country Director (DCD), Country Director (CD), Deputy
	Resident Representative (DRR), or Resident Representative (RR). The QA Approver cannot also be the
	QA Assessor. Final signature confirms they have "cleared" the SESP prior to submittal to the PAC.
PAC Chair	UNDP chair of the PAC. In some cases PAC Chair may also be the QA Approver. Final signature confirms
	that the SESP was considered as part of the project appraisal and considered in recommendations of the
	PAC.

### SESP Attachment 1. Social and Environmental Risk Screening Checklist

	cklist Potential Social and Environmental <u>Risks</u>	Answer
Princ	ciples 1: Human Rights	(Yes/No
1.	Could the Project lead to adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups?	No
2.	Is there a likelihood that the Project would have inequitable or discriminatory adverse impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups? <sup>1</sup>	No
3,	Could the Project potentially restrict availability, quality of and access to resources or basic services, in particular to marginalized individuals or groups?	No
4.	Is there a likelihood that the Project would exclude any potentially affected stakeholders, in particular marginalized groups, from fully participating in decisions that may affect them?	No
5.	Is there a risk that duty-bearers do not have the capacity to meet their obligations in the Project?	No
6.	Is there a risk that rights-holders do not have the capacity to claim their rights?	No
7.	Have local communities or individuals, given the opportunity, raised human rights concerns regarding the Project during the stakeholder engagement process?	No
8.	Is there a risk that the Project would exacerbate conflicts among and/or the risk of violence to project- affected communities and individuals?	No
Princ	iple 2: Gender Equality and Women's Empowerment	
1.	Is there a likelihood that the proposed Project would have adverse impacts on gender equality and/or the situation of women and girls?	No
2.	Would the Project potentially reproduce discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	No
3.	Have women's groups/leaders raised gender equality concerns regarding the Project during the stakeholder engagement process and has this been included in the overall Project proposal and in the risk assessment?	Yes
4.	Would the Project potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services?	No
	For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well being	
	iple 3: Environmental Sustainability: Screening questions regarding environmental risks are encompassed by pecific Standard-related questions below	
Stand	dard 1: Biodiversity Conservation and Sustainable Natural Resource Management	
1.1	Would the Project potentially cause adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services?	No

<sup>&</sup>lt;sup>1</sup> Prohibited grounds of discrimination include race, ethnicity, gender, age, language, disability, sexual orientation, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. References to "women and men" or similar is understood to include women and men, boys and girls, and other groups discriminated against based on their gender identities, such as transgender people and transsexuals.

1.2	Are any Project activities proposed within or adjacent to critical habitats and/or environmentally sensitive	No
1.2	areas, including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?	
1.3	Does the Project involve changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? (Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5)	No
1,4	Would Project activities pose risks to endangered species?	No
1.5	Would the Project pose a risk of introducing invasive alien species?	No
1.6	Does the Project involve harvesting of natural forests, plantation development, or reforestation?	No
1.7	Does the Project involve the production and/or harvesting of fish populations or other aquatic species?	No
1.8	Does the Project involve significant extraction, diversion or containment of surface or ground water?  For example, construction of dams, reservoirs, river basin developments, groundwater extraction	No
1.9	Does the Project involve utilization of genetic resources? (e.g. collection and/or harvesting, commercial development)	No
1.10	Would the Project generate potential adverse transboundary or global environmental concerns?	No
1.11	Would the Project result in secondary or consequential development activities which could lead to adverse social and environmental effects, or would it generate cumulative impacts with other known existing or planned activities in the area?	No
	For example, a new road through forested lands will generate direct environmental and social impacts (e.g. felling of trees, earthworks, potential relocation of inhabitants). The new road may also facilitate encroachment on lands by illegal settlers or generate unplanned commercial development along the route, potentially in sensitive areas. These are indirect, secondary, or induced impacts that need to be considered. Also, if similar developments in the same forested area are planned, then cumulative impacts of multiple activities (even if not part of the same Project) need to be considered.	
Stand	ard 2: Climate Change Mitigation and Adaptation	
2.1	Will the proposed Project result in significant <sup>2</sup> greenhouse gas emissions or may exacerbate climate change?	No
2.2	Would the potential outcomes of the Project be sensitive or vulnerable to potential impacts of climate change?	No
2.3	Is the proposed Project likely to directly or indirectly increase social and environmental vulnerability to climate change now or in the future (also known as maladaptive practices)?	No
elektroor teen	For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding	
Stand	ard 3: Community Health, Safety and Working Conditions	
3.1	Would elements of Project construction, operation, or decommissioning pose potential safety risks to local communities?	No
3.2	Would the Project pose potential risks to community health and safety due to the transport, storage, and	No

 $<sup>^{2}</sup>$  In regards to CO<sub>2,</sub> 'significant emissions' corresponds generally to more than 25,000 tons per year (from both direct and indirect sources). [The Guidance Note on Climate Change Mitigation and Adaptation provides additional information on GHG emissions.]

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3.3	Does the Project involve large-scale infrastructure development (e.g. dams, roads, buildings)?	No
3.4	Would failure of structural elements of the Project pose risks to communities? (e.g. collapse of buildings or infrastructure)	No
3.5	Would the proposed Project be susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions?	No
3,6	Would the Project result in potential increased health risks (e.g. from water-borne or other vector-borne diseases or communicable infections such as HIV/AIDS)?	No
3.7	Does the Project pose potential risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during Project construction, operation, or decommissioning?	No
3.8	Does the Project involve support for employment or livelihoods that may fail to comply with national and international labor standards (i.e. principles and standards of ILO fundamental conventions)?	No
3.9	Does the Project engage security personnel that may pose a potential risk to health and safety of communities and/or individuals (e.g. due to a lack of adequate training or accountability)?	No
Stand	ard 4: Cultural Heritage	
4.1	Will the proposed Project result in interventions that would potentially adversely impact sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: Projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	No
4.2	Does the Project propose utilizing tangible and/or intangible forms of cultural heritage for commercial or other purposes?	No
Stand	ard 5: Displacement and Resettlement	
5.1	Would the Project potentially involve temporary or permanent and full or partial physical displacement?	No
5.2	Would the Project possibly result in economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	No
5.3	Is there a risk that the Project would lead to forced evictions? <sup>3</sup>	No
5,4	Would the proposed Project possibly affect land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources?	No
Stand	ard 6: Indigenous Peoples	
6.1	Are indigenous peoples present in the Project area (including Project area of influence)?	Yes
6,2	Is it likely that the Project or portions of the Project will be located on lands and territories claimed by indigenous peoples?	Yes
6.3	Would the proposed Project potentially affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples (regardless of whether indigenous peoples possess the legal titles to such areas, whether the Project is located within or outside of the lands and territories inhabited by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)?	No
	If the answer to the screening question 6.3 is "yes" the potential risk impacts are considered potentially severe and/or critical and the Project would be categorized as either Moderate or High Risk.	

<sup>&</sup>lt;sup>3</sup> Forced evictions include acts and/or omissions involving the coerced or involuntary displacement of individuals, groups, or communities from homes and/or lands and common property resources that were occupied or depended upon, thus eliminating the ability of an individual, group, or community to reside or work in a particular dwelling, residence, or location without the provision of, and access to, appropriate forms of legal or other protections.

6.4	Has there been an absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?	No
6.5	Does the proposed Project involve the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	No
6.6	Is there a potential for forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources?	No
6.7	Would the Project adversely affect the development priorities of indigenous peoples as defined by them?	No
6.8	Would the Project potentially affect the physical and cultural survival of indigenous peoples?	No
6.9	Would the Project potentially affect the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices?	No
Stand	dard 7: Pollution Prevention and Resource Efficiency	
7.1	Would the Draiget notantially regult in the release of nell stants to the engineerment due to routine or non	No
	Would the Project potentially result in the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?	140
7.2		No
7.2	routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?  Would the proposed Project potentially result in the generation of waste (both hazardous and non-	
	routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?  Would the proposed Project potentially result in the generation of waste (both hazardous and non-hazardous)?  Will the proposed Project potentially involve the manufacture, trade, release, and/or use of hazardous chemicals and/or materials? Does the Project propose use of chemicals or materials subject to	No
	routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?  Would the proposed Project potentially result in the generation of waste (both hazardous and non-hazardous)?  Will the proposed Project potentially involve the manufacture, trade, release, and/or use of hazardous chemicals and/or materials? Does the Project propose use of chemicals or materials subject to international bans or phase-outs?  For example, DDT, PCBs and other chemicals listed in international conventions such as the Stockholm	No

### **ANNEX 2: OFFLINE RISK LOG**

t Title: South South Co ogy Early Warning Sy	t Title: South South Cooperation: Strengthening Climate and	ly Warning Systems for 7 selected PICs
77	Project Title: South South Coope	lydrology Early Warning System

Award ID:

Status		
Last Update		
Submitted, updated by		
Owner	7 Countries and Team Partners	7 Countries
Countermeasures Management Response	The regional and national framework strengthens the coordination of the engagement of these regional and national institutions. These framework forms the basis of this project intervention with limited environmental risk as compared to social risk.	The Training Need Analysis from the selected countries are in place informing training requirements for climate and hydrology early warning systems. This is also part of
Impact and Probability	Thou this is low significance level risk; however, it can be a significant social risk if not full buy-in is achieved    = 2  P = 2	This is a social risk with low significance due to its impact. The high turnover of trained staff may impact the achievement of the projects outputs.
Type	Political Strategic	Operational Social
Date Identified	Since	Since
Description	Lack of engagement and coordination among regional and national institutions	High Staff Turnover
No.	<b></b>	7

the career succession plan for staff to be trained.	Procurement Plan for technology will strictly consider the environmental and social impacts. i.e. specifications.
D == 3	This is an environmental risk with moderate significance due to its impact. If equipments are not climate proof, then potential corrosion impact would need to be considered in the specification. Waste management disposal will be considered in terms of reusable and recycling approaches.  I = 2  P = 3
	Environmental Operational
	Since
	Non-Climate Proof Technology to suit Atolls environmental condition
	m

### PROJECT BOARD TERMS OF REFERENCE (POPPS)

### **MAJOR RESPONSIBILITIES**

- a. Provide overall guidance and direction to the project, ensuring it remains within any specified constraints;
- b. Address project issues as raised by the project manager;

c. Provide guidance on new project risks, and agree on possible countermeasures and management actions to address specific risks;

d. Agree on project manager's tolerances as required;

e. Review the project progress, and provide direction and recommendations to ensure that the agreed deliverables are produced satisfactorily according to plans;

- f. Review combined delivery reports prior to certification by the implementing partner;
- g. Appraise the project annual review report, including the quality assessment rating report; make recommendations for the workplan; and inform the outcome group about the results of the review;
- h. Provide ad hoc direction and advice for exceptional situations when the project manager's tolerances are exceeded; and
- i. Assess and decide to proceed on project changes through appropriate revisions, as also approved by the G-chairs of the fund.

### UNDP programme manager (Resident Representative or delegated authority):

- a. Ensure that resources entrusted to UNDP are utilized appropriately;
- b. Ensure that the project is making progress towards intended outputs;
- Ensure national ownership, ongoing stakeholder engagement and sustainability;
- d. Ensure that the project's outputs contribute to intended country programme outcomes;
- e. Ensure that key results and issues pertaining to project performance are fed into the outcome and programme level monitoring; and
- f. Approve multiyear budget in Atlas.

### Implementing partner (authorized personnel with delegated authority):

- a. Approve and sign the multiyear workplan
- b. Approve and sign the combined delivery report at the end of the year; and

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Sign the financial report or the funding authorization and certificate of expenditures

### **Project manager**

- a. Plan the activities of the project and monitor progress against the approved workplan;
- Mobilize personnel, goods and services, training and micro-capital grants to initiative activities, including drafting terms of reference and work specifications, and overseeing all contractors' work;
- c. Monitor events as determined in the project monitoring schedule plan, and update the plan as required;
- Manage requests for the provision of financial resources by UNDP, through advance of funds, direct payments or reimbursement using the fund authorization and certificate of expenditures;
- e. Monitor financial resources and accounting to ensure the accuracy and reliability of financial reports;
- f. Be responsible for preparing and submitting financial reports to UNDP on a quarterly basis;
- g. Manage and monitor the project risks initially identified and submit new risks to the project board for consideration and decision on possible actions if required; update the status of these risks by maintaining the project risks log;
- h. Capture lessons learned during project implementation; a lessons learned log can be used (see <u>template</u>).
- i. Perform regular progress reporting to the project board as agreed with the board;
- j. Prepare the amoutal review report, and submit the report to the project board and the outcome group; and to the Trust Fund Board
- k. Prepare the annual workplan for the following year, as well as quarterly plans if required; and
- I. Update the Atlas Project Management module if external access is made available.

### PROJECT GOVERNANCE STRUCTURES

### m. Share pictures, news stones, and Communication materials on the project.

### **ROLES AND RESPONSIBILITIES**

### 1. UNDP project assurance

a. Ensure that funds are made available to the project;

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- b. Assure the quality of the project annually using the project quality assurance rating tool for the implementation monitoring phase.
- c. Ensure the project is making progress towards intended outputs;
- d. Perform regular monitoring activities, such as periodic monitoring visits and 'spot checks';
- e. Ensure that resources entrusted to UNDP are utilized appropriately;
- f. Ensure that critical project information is monitored and updated in Atlas;
- g. Ensure that financial reports are submitted to UNDP on time, and that combined delivery reports are prepared and submitted to the project board; and
- h. Ensure that risks are properly managed, and that the risk log in Atlas is regularly updated.

### Project support

- a. Set up and maintain project files;
- b. Collect project-related information data;
- c. Assist the project manager in updating project plans;
- d. Administer project board meetings;
- e. Administer project revision control;
- f. Establish document control procedures;
- g. Compile, copy and distribute all project reports;
- h. Assist in the financial management tasks under the responsibility of the project manager;
- i. Provide support in the use of Atlas for monitoring and reporting;
- j. Review technical reports; and
- k. Monitor technical activities carried out by responsible parties.

trust Fund Board

a. Ensure additional oversipht and monitoring;

b. Consider project revisions and extensions;

c. Support visibility efforts for project

accomplishments.

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