Joint Programme Document

A. COVER PAGE

1. Fund Name:

Joint SDG Fund

2. MPTFO Project Reference Number:
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3. Joint programme title:

Building Forward Better by Safeguarding Natural Capital and Ecosystem Services

4. Short title:

UNJP on Ecosystem Services

5. Country and region:

The Independent State of Samoa, Asia-Pacific.

6. Resident Coordinator:

Simona Marinescu, PhD, UN Resident Coordinator for Samoa MCO Cluster simona.marinescu@un.org.

7. UN Joint programme focal point:

- Eliselisapeta Eteuati-Kerslake, UN Resident Coordinator Office (RCO), elisapeta.eteuatikerslake@un.org

8. Government Joint Programme focal point:

- Peseta Noumea SIMI, Chief Executive Officer, Ministry of Foreign Affairs and Trade, Government of Samoa (Primary) noumea@mfat.gov.ws;

9. Short description:

The *UN Joint Programme Building Forward Better by Safeguarding Natural Capital and Ecosystem*[1] *Services* (hereafter, *UNJP on Ecosystem Services*), will support develop policy and planning, collection of data and valuation of ecosystem services to support development of scenarios for future, reporting against SDGs 11-15, and build a case for investment in ecosystem services given their centrality to human wellbeing, which are critical for the realization of the SDGs 1 to 3.

[1] Coined by botanist Arthur Roy Clapham and first used by ecologist Arthur Tansley, the term *ecosystem* is defined as all organisms and the physical environment in which these biotic and abiotic components are linked together through nutrient cycles and energy flows and are controlled by external (climate, soil, etc.) and internal factors (decomposition, etc.). *Ecosystem services* are defined as the direct and indirect benefits from ecosystems to human wellbeing which affects survival and quality of life. Four distinct types of ecosystem services have been identified, which are: provisioning, regulating, cultural and supporting services. The capacity of an ecosystem to absorb external shocks and reorganize internally with some changes to retain essential function, structure, identity, and feedback (reproduction) forms *ecological resilience*. When ecological resilience is compromised, ecosystem services are compromised.

The UNJP on Ecosystem Services will make a contribution to the:

- UN Decade on Ecosystem Restoration (2021-2030), specifically, actions 6-9[2]
- Decade of Ocean Science for Sustainable Development (2021-2030), specifically, societal goals 5-6[3] and research and development goal 7[4].

These contributions would be made using participative and gender, age and disability transformative process that would bring together scientists, policy makers, administrators, and service users for the restoration of the terrestrial and ocean ecosystems of Samoa and its valuation, in particular, involving women and youth.

10. Keywords:

#EcosystemServices #NatureSamoa #EcosystemDecadeSamoa #OceanDecadeSamoa #NaturalCapital #BiodiversitySamoa #UNJPEcosystemSamoa #JointSDGFundSamoa

11. Overview of budget (based on the detailed budget in the Annex 5)

Joint SDG Fund contribution	**USD 710,401.00**
Co-funding 1 **UNESCO**	USD 39,700.00
Co-funding 2 **UNESCAP**	USD 27,087.00
TOTAL	**USD 777,188.00**

12. Timeframe:

Start date *(day/month/year)*	**End date** *(day/month/year)*	**Duration** *(in months)*
01 Jan 2022	31 Dec 2023	24 Months

13. Gender Marker:
Please see Annex 4.

14. Target groups *(including groups left behind or at risk of being left behind)*

List of marginalized and vulnerable groups	**Direct influence**	**Indirect influence**
Women	X 204	X 1,020
Children	X 0	X 800
Girls	X 0	X 450
Youth	X 14	X 0
Persons with disabilities	X 4	X 0
Older persons	X 50	X 200
Minorities (incl. ethnic, religious, linguistic...)	X 5	X 20
Indigenous peoples	N/A	N/A
Rural workers	X 100	X 1000
Human rights defenders (incl. NGOs, journalists, union leaders, whistleblowers…)	X 2	X 8

[2] Ecosystem Decade Actions: 6. Invest in research; 7. Build up capacity; 8. Celebrate a culture of restoration; and 9. Build up the *next generation*.
[3] Ocean Decade Societal Goals: 5. A sustainably harvested and productive ocean; and 6. A "transparent and accessible" ocean.
[4] Ocean Decade Research and Development Goal: 7. Ocean in earth-system observation, research and prediction, supported by social and human sciences and economic valuation.

Migrants	N/A	N/A
Refugees & asylum seekers	N/A	N/A
Internally displaced persons	N/A	N/A
Stateless persons	N/A	N/A
LGBTI persons (sexual orientation and gender identity)	X 2	X 8
Persons of African Descent (when understood as separate from minorities)	N/A	N/A
Persons affected by (HIV/AIDS, leprosy…)	N/A	N/A
Persons with albinism	N/A	N/A
Persons deprived of their liberty	N/A	N/A
Victims or relatives of victims of enforced disappearances	N/A	N/A
Victims of (slavery, torture, trafficking, sexual exploitation and abuse...)	X 2	X 8
Other groups:		

15. Human Rights Mechanisms related to the Joint Programme

While there is no specific national mechanism concerning environmental rights or to address crimes affecting natural resources, Samoa has adopted/ratified/signed a number of international instruments, which form part of the legal and policy framework for Convention on Biological Diversity, integrated in the national laws concerning environment and are subject to adjudication by the national judicial system. They are:

i. Convention on Biological Diversity (CBD) 1992, and
   - Cartagena Protocol on Biosafety to the Convention on Biological Diversity (CPB) 2000
   - Nagoya Protocol 2010

i. Conventions on International Trade in Endangered Species of Wild Fauna and Flora (CITES) 1963
ii. Convention for the Protection of the World Cultural and Natural Heritage 1972
iii. United Nations Convention on the Law of the Sea (UNCLOS) relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks 1982
iv. Ramsar Convention on Wetlands 1987
v. Convention on the Conservation of Migratory Species of Wild Animals 1979

Related to the above, Samoa has a number of legislation that have a direct bearing on ecosystems and biodiversity as a whole and are enforceable in the court of law. These include:

- Forestry Management Act 2011
- Spatial Information Agency Act 2010
- Waste Management Act 2010
- Water Resources Management Act 2008
- Planning and Urban Management Act 2004
- Marine Pollution Prevention Act 2008
- National Parks and Reserves Act 1974
- Disaster Management Act 2007
- Land Valuation Act 2010
- National Heritage Board Bill (ongoing legislative process). Last action on 14 Dec 2018
- Protection of Traditional Knowledge Bill (ongoing legislative process). Last action on 14 Dec 2018
- Quarantine and Biosafety Act 2005
- Lands Surveys and Environment Act 1989

The country has enacted a number of policies since ratification of the CBD. The prevailing biodiversity-related policies and national strategies to meet regional and international obligations include:

- Climate Change Policy 2020,
- Samoa Ocean Strategy 2020-2030,
- National Environment Sector Plan 2017-2021,
- O Le Pupū Pu'e National Park (Ramsar Site) Management Plan 2020-2030,
- Mauga o Salafai National Park Management Plan 2018-2023
- Masamasa-Falelima National Park Management Plan

16. PUNO and Partners:

16.1 PUNO

- Convening agency:
  - United Nations Educational, Scientific and Cultural Organization. (UNESCO)
    - Nisha, Director of the Office and UNESCO Representative to the Pacific States, nisha@unesco.org.
  -
- Other PUNO:
  - United Nations Economic and Social Commission for Asia and the Pacific (UN-ESCAP)
    - Iosefa Maiava, Head of Office, maiavai@un.org;
  - United Nations Environment Programme (UNEP)
    Sefanaia Nawadra, Head of Office, United Nations Environment Programme (UNEP) sefanaia.nawadra@un.org.

16.2 Partners

- National authorities:
  - Scientific Research Organisation of Samoa (SROS), (Technical Counterpart)
    Seuseu Joseph Tauati, PhD, Chief Executive Officer,
    seuseu@srosmanagement.org.ws
  - Ministry of Natural Resources and Environment (MNRE) (Technical Counterpart)
    Frances Debra Brown-Reupena, Chief Executive Officer,
    ceo@mnre.gov.ws and fran.reupena@mnre.gov.ws
  - Samoa Bureau of Statistics (SBS), Government of Samoa (Technical Counterpart) Aliimuamua Malaefono Taua,
    malaefono.taua@sbs.gov.ws
- Civil society organizations:
  - Concerned village committee
  - Concerned women's committee
  - Concerned youth committee
  - Other CSOs as mentioned in Table 2.
- Private sector:
  - To be identified
- IFIs
  - World Bank/Asian Development bank (to be explored)
- Other partners:
  - Secretariat of the Pacific Regional Environment Programme (SPREP)

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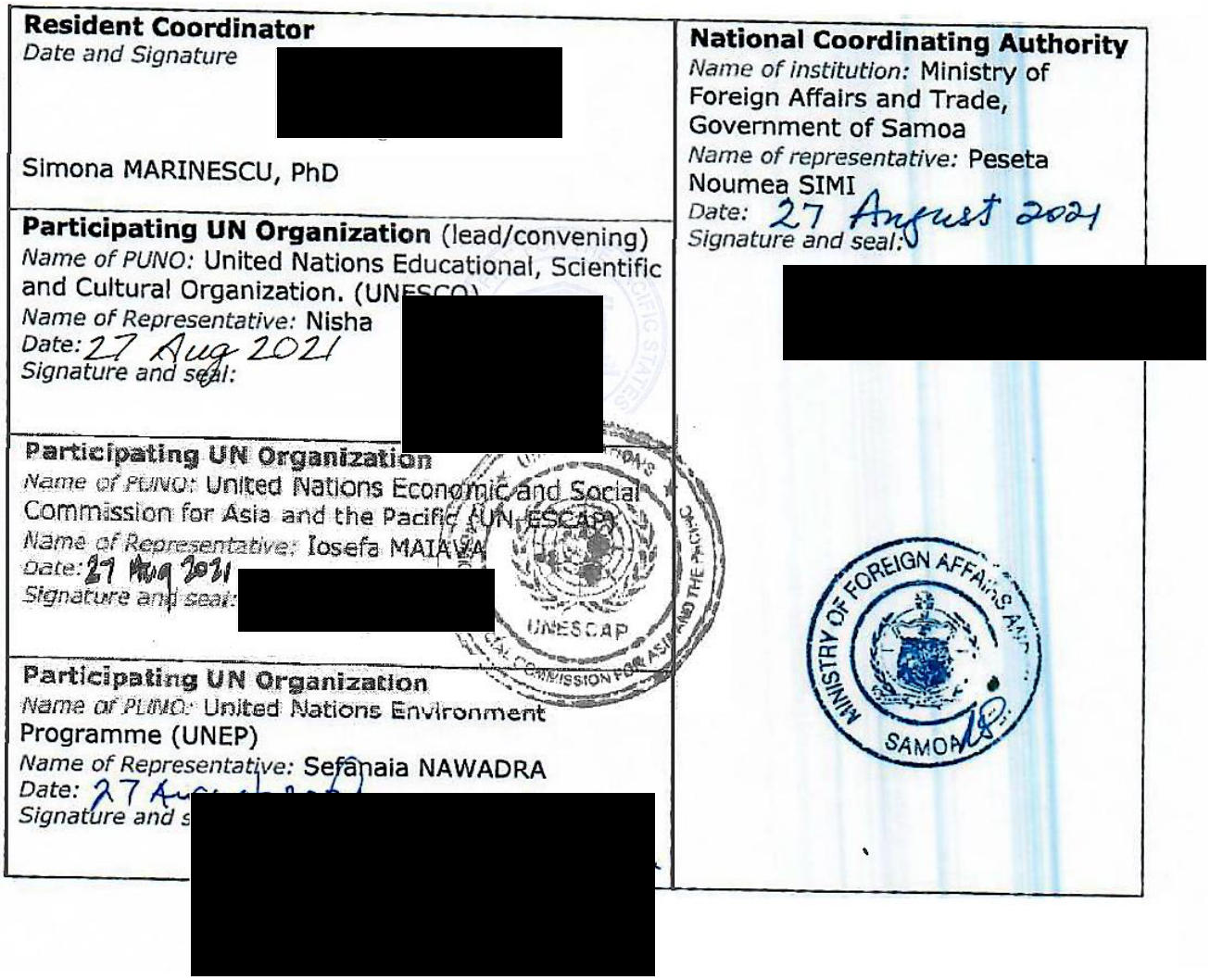


Resident Coordinator
Date and Signature

[redacted]

Simona MARINESCU, PhD

Participating UN Organization (lead/convening)
Name of PUNO: United Nations Educational, Scientific and Cultural Organization. (UNESCO)
Name of Representative: Nisha
Date: 27 Aug 2021
Signature and seal:

[redacted]

Participating UN Organization
Name of PUNO: United Nations Economic and Social Commission for Asia and the Pacific (UN, ESCAP)
Name of Representative: Iosefa MAIAVA
Date: 27 Aug 2021
Signature and seal:

[redacted]

UNESCAP

Participating UN Organization
Name of PUNO: United Nations Environment Programme (UNEP)
Name of Representative: Sefanaia NAWADRA
Date: 27 Aug
Signature and s

[redacted]

National Coordinating Authority
Name of institution: Ministry of Foreign Affairs and Trade, Government of Samoa
Name of representative: Peseta Noumea SIMI
Date: 27 August 2021
Signature and seal:

[redacted]

MINISTRY OF FOREIGN AFFAIRS AND TRADE
SAMOA

B. STRATEGIC FRAMEWORK

1. Call for Proposal

Building Resilience and Ending Vulnerability in Small Island Developing States (3/2021)

2. Relevant Joint SDG Fund Outcomes

- Outcome 1: Integrated multi-sectoral policies to accelerate SDG achievement implemented with greater scope and scale.

3. Overview of the Joint Programme Results

The UN Cooperation Framework, called UN Pacific Strategy or UNPS 2018-22 in the Pacific has six outcome areas. All three outcomes of this UNJP will contribute to the following outcome and provide data for the related outcome indicator.
3.1) United Nations Pacific Strategy Outcome 1: By 2022, people and ecosystems in the Pacific are more resilient to the impacts of climate change. Climate variability and hazards, and environmental protection is strengthened.

- United Nations Pacific Strategy Indicator 1.5: Coverage and protection of terrestrial and marine areas.

The UNJP will contribute this this outcome by helping Samoa:

- Meet data requirement for the UNPS 2018-22 indicator 1.5. This UNPS indicator is directly relevant to SDG indicators 14.2.1 (Proportion of national exclusive economic zones managed using ecosystem-based approaches), 14.5.1 (Coverage of protected areas in relation to marine areas) and indicator 15.1.2 (Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type).
- Improve capacity for terrestrial and marine ecosystem monitoring and restoration.

3.2) The UNPS 2018-22 is framed at the outcome level and does not include outputs. This UNJP's outputs would provide new knowledge, capacity for behaviour change and impact that will support the UNPS 2018-22 outcome 1 at the macro level.

4. SDG Targets directly addressed by the Joint Programme

4.1) List of targets that are directly addressed from this UNJP on Ecosystem Services are:

- *SDG 14:* Conserve and sustainably use the oceans, seas and marine resources for sustainable development with emphasis on,
    - *Target 14.2:* By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans
- *SDG 15:* Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss, specifically,
    - *Target 15.1:* By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.

- *Target 15.4:* By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development
- *Target 15.5*: Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species.
- *Target 15.8*: By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species.
- *Target 15.9:* By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts.
- *Target 15.a:* Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems.

4.2) Expected SDG impact

Deeper assessments, data, and accounting focusing on the key SDG targets mentioned above would help policymakers, business leaders, and other impact actors, including community institutions, understand: First, forms of environmental destruction and substances in marine areas that need to be taken into account; and second, qualitative and quantitative data would be available to guide policy and economic decisions with credible evidence. Clearly linking improving biodiversity, increasing reforestation, genetic safeguarding ecosystem-based riverine restoration practices, with the socioeconomic benefits of associated ecosystem services would spur multi-stakeholder action in these areas. Communicating the benefits of the ecosystem services local communities will enable greater buy-in and help the trade-off make sense to them.

5. Relevant objective/s from the national SDG framework

- While a new short-term national development document is not yet finalized, the latest *Strategy for the Development of Samoa (SDS 2016/17-2019/20)*, which prioritizes SDGs and which expired at the end of June 2020 continues to be used. The UNJP on Ecosystem Services directly contributed to the *SDS 2016/17-2019/20* Priority Area 4: Environment, specifically, Key Outcome 13: Environmental Resilience Improved.

- The National Environment Sector Plan (NESP) 2017-2021 is supplementary national instrument to the SDS and facilitates the environment sector's contribution to the SDS. Revision of the SDS also requires a new NESP.

- The long-term national development document, *Samoa 2040*, identifies the key areas of economic growth and strategies for harnessing growth. The UNJP on Ecosystem Services would support the strategy of *Ensuring Resilient Investment* since "Samoa's economy and people are heavily dependent on the ecosystems and services they provide…" (Pg. 52-53)

- While the whole of the *National Biodiversity Strategy and Action Plan 2015-2020* of Samoa is relevant to this UNJP, the most critical linkage is to the:
  - *Strategic Goal A:* Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society, specifically,
    - *Target 1:* By 2020, at the latest, the people of Samoa are aware of the values of biodiversity, the threats its faces, and the steps the Government and the people can take to conserve, protect and use it sustainably
    - Target 2: By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies

and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.

- *Strategic Goal C:* Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity
  - Target 15: By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.
- *Strategic Goal E:* Enhance implementation through participatory planning, knowledge management and capacity building
  - Target 17: By 2020 Samoa has developed, adopted as a policy instrument, and is actively implementing an effective, participatory and updated national biodiversity strategy and action plan.
  - Target 18: By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are fully protected by national legislation and relevant international obligations, and fully integrated and reflected in national and sector plans and budgetary processes.

6. Brief overview of the Theory of Change of the Joint programme

6.1) Summary:

The theory of change of the UNJP on Ecosystem Services uses a premise that if ecosystems are to be conserved and managed sustainably to enhance health and well-being and sustainable use and management of natural resource, then boosting policies and plans for investment in ecosystems conservation and management for sustainable use, improving capacity for information and data on ecosystem services and making investment decisions taking into account full value and links of ecosystem services to sustainable development generated in participation with the stakeholders, including women and youth is critical.

The three outcomes of the UNJP outcomes are built on seven outputs concerning policies and strategies, institution strengthening and capacity building, safeguarding of genetic diversity, improved capacity for evidence-based policymaking, institutional mechanism for ecosystem monitoring, data, and ocean account to propel action by communities, decision makers and investors.

6.2) List of main ToC assumptions to be monitored:

- Gender equality and youth participation are prioritised by PUNOs and partners.
- Restoration of damaged ecosystems will be seen as increasingly important by the communities, including women and youth.
- Policy- and decision-makers would be motivated to improve evidence base for recovery of ecosystems.
- COVID-19 pandemic has reinforced an interest in sustainable development.
- Institutional stakeholders, including women led private sector entities would see ecosystem services as essential to their continuity.

7. Trans-boundary and/or regional issues

The islands of the Pacific and their forests cover only a small fraction of the earth but are estimated to harbour unique terrestrial plant species. Some of the species came with the first settlers; others found their way through the ocean, wind or birds. These species have

adapted over centuries to the environments of islands and atolls. Women and men of the Pacific developed intergenerational knowledge and ways of benefitting from the natural resources and formed an integrated biosphere. The adaptation processes have been going on in isolation, creating new species found nowhere else in the world. This terrestrial biodiversity performs ecosystem services that maintain forest and species health and productivity, including in Samoa. Climate change, sea-level-rise, logging, forest clearance for plantations, large-scale infrastructure are often a common and major threat to biodiversity across the Pacific and an area of knowledge exchange and learning for well-managed forests and overall biodiversity conservation.

Pacific is also the largest basin of the ocean system and terrestrial biodiversity and marine biodiversity are closely interwoven and ecosystems extremely sensitive to climatic variations and oceanic precipitation. This reality also makes terrestrial and marine biodiversity highly fragile. The traditional lifestyle and usage of both the terrestrial and marine ecosystem services by the communities and division of roles among women and men, and youth and elders have been based on experiential or observational understanding of nature-human relationship and needs for conservation. However, such understanding and knowledge are fast disappearing. There is, therefore, an increasing need for integrated and coordinated conservation among the Pacific nations and for linking needs of transboundary marine reserves with island-specific corridors of mangroves and other natural heritage to maximize biodiversity.

C. JOINT PROGRAMME DESCRIPTION

1. Baseline and Situation Analysis

1.1 Problem statement[5]

(a) Biodiversity in Samoa:

Samoa's vegetation is divided into five plant communities (littoral vegetation, wetland vegetation, rainforest, volcanic scrub, disturbed vegetation). The country's flora consists of 500 species of native flowering plants and about 220 species of ferns in 96 families and 298 genera, making it one of the most diverse flora in Polynesia. Overall, about 25% of the native plant species are endemic to Samoa and 32% endemic to the Samoan archipelago. In the agricultural ecosystem, the main cultivated crops are taro, bananas, breadfruits, yams, cacao and coconuts. Samoan coastal and marine ecosystems are characterized by large and vulnerable reefs (covering 490 km3), as well as 14 families with at least 45 species of corals (mainly Acropora). In terms of faunal diversity, there are 13 species of terrestrial mammals, 44 species of land birds, 21 species of seabirds, 15 species of reptiles, 59 species of insects, 64 species of land snails and 28 species of butterflies. In particular, Samoa's fish fauna is regarded as among the richest in the world, with up to 991 species recorded (890 inhabiting shallow water or reefs, 56 found in deeper water and 45 being pelagic). In terms of freshwater biodiversity, which remains relatively unknown, 30 species of fish and 17 species of macro-crustaceans have been reported. In 1999, 198 taxa of algae, with a known species count of 287, were reported.

Samoa's economy relies heavily on ecosystem protection, especially in the agricultural sector, which accounts for more than one-tenth of the country's GDP, as well as in industry, which is based mainly on tourism, coconuts, small-scale manufacturing and fishing. In particular, exports from Samoa, which have amounted to almost US$16 million in recent years, depend directly on the availability of coconut products and fish.

At present, **ecosystems of global and national significance, such as coastal and montane rainforests, are being critically degraded**. While some require immediate interventions, others have already been completely destroyed in the past two decades as a result of human activities such as, coastal pollution, logging, agricultural clearing, forest fires and human settlement, and climate change and cyclones. An example of a vulnerable ecosystem is the Samoan forest, whose cover has been in steady decline since the first aerial photos were taken in 1954. Although the highest rate of forest loss, resulting from

[5] References:

- MNRE, Apia. MNRE - Ministry of Natural Resources and Environment - Samoa. Accessed 02-10 Aug 2021.
- MNRE, Samoa, CBD Sixth National Report - Samoa. Accessed 10 Aug 2021.
- CBD, Samoa-Country Profile, 2018. Available at: https://www.cbd.int/countries/profile/default.shtml?country=ws#facts, profile-pending approval by Samoa. Accessed 09 Aug 2021.
- SPREP, Apia. Samoa National Biodiversity Strategy and Action Plan 2015-2020 https://samoa-data.sprep.org/index.php/resource/national-biodiversity-strategy-and-action-plan-2015-2020. Accessed 09-11 Aug 2021.

commercial logging and cyclones, was reached between the early 1970s and early 1990s, **degradation and fragmentation are expected to continue as a result of cyclones, agro-deforestation and settlements**, which are likely to increase as a result of the Government's objective to expand commercial agriculture, as set forth in the National Development Strategy (2008-2012). Other ecosystems, such as coral reefs, display less straightforward trends. Assessments led in 2002, 2004 and 2008, as part of the Status of Coral Reefs of the World reports, saw percentages of living coverage fluctuating from a mean of 39% in 2002, to 10.3% in 2004 and 43% in 2008 – a sign of remarkable recovery, although the **impact of overfishing, coastal development and cyclones remains a major threat**.

The **status of faunal and floral species follows the overall declining trend** in natural habitats. **Eleven terrestrial and 65 marine species found in Samoa are listed as globally threatened** on the 2009 International Union for Conservation of Nature (IUCN) Red List of Threatened Species, but the true number of threatened species in Samoa is much higher, perhaps in the hundreds. Some of these species, such as the Ma'oma'o and the Manumea, two bird species for which conservation projects were launched in 2006, are found nowhere else in the world. In 1992, **136 floral species were listed as threatened or endangered,** with a further 500 or so **plant species having been introduced**, most of which are beneficial to the environment however, others have since become **highly invasive**.

(b) Social and Gender Dimensions of Biodiversity:

The homogeneity of Samoan communities is an important factor in the success or failure of collective action for common-pool resource management. The local Matai (a layered chiefly system) presents a complex set of boundaries concerning natural resources commons decision-making and resource users. Village social hierarchies are **predominantly male** and land mostly customary, which means that decision-making concerning the land, is predominantly in the hands of men. The village councils comprising of the chiefs, nearly 80 per cent of who are men, retain authority within the communities. While they work through pre-existing community social structures like women's committees and youth committees for implementation, they involve them in decision-making that pertain to family matters, village beautification, cleaning and other communitarian social activities. Women Matai, where they do exist, are not always and not all of them as **confident** to participate in the village committees as men matai. The untitled men, young or old, (or those who are not bestowed a chiefly title), although not part of the village committee still have better access to the village committee discussions, and therefore, more likely to be prepared for public engagement and decision-making than women and girls. Since the chiefly title is bestowed by bloodline, women who do become a Matai, can be a Matai in their natal village, not in marital village where they are part of the women's committee. Since by norm, women move to their spouse's home after marriage, **logistically** too it is harder for the women Matai to remain active in their natal Village Committee, unless they are determined and very confident.

(c) Systems and Measures to Enhance Ecosystem Services:

Samoa has been updating the National Biodiversity Strategy and Action Plan 2015-2020 (NBSAP) every five-years since May 2001, when the first NBSAP was adopted. The latest NBSAP covers ecosystem services under five areas in relation to Samoa's development –

agricultural biodiversity, fisheries and marine resources, forests, terrestrial and marine fauna, and biodiversity and tourism.

Based on information available, significant gains have been made in identifying and setting aside high value areas for protection, and extending Samoa's terrestrial and marine protected area network. The expanded network of Key Biodiversity Areas (KBAs) comprises 33% of Samoa's terrestrial and inshore areas. Since 2001, Samoa's protected area network has increased and 8% of Samoa's total terrestrial and marine areas are under protection and conservation management. The NBSAP 2001 set the target at 15%. However, a review conducted in 2009 identified gaps based on criteria of representativeness and degree of threat/rarity of ecosystems and species, and identified new areas for an expanded network. The NBSAP implementation has also suffered as a result of ad-hoc monitoring of biodiversity for most terrestrial species of conservation importance and narrowly focused on specific projects or species and habitats associated. This is due to monitoring through specific projects, which target particular species. Lack of institutional mechanism and gaps in capacity coupled with largely donor-funded nature of biodiversity conservation creates issues in sustainability.

(d) 2020 Aichi Biodiversity Targets and Post-Aichi Target:

Since the adoption of the NBSAP, notable progress has been achieved in regard to protected areas, whose collective area has more than doubled over the last 10 years. Thirteen botanical reserves were established between 1999 and 2007, bringing the total number of reserves, including botanic, marine, and recreational reserves, to eighteen, with Samoa's marine protected areas network now comprising 12,011,437 hectares. The NBSAP has also been catalytic for the formulation of several biodiversity-related policies. For instance, the Ministry of Natural Resources and Environment's National Invasive Alien Species Implementation Action Plan (2005) includes actions for increasing the effectiveness of border control, monitoring rodents and Giant African Snails, as well as eradication activities targeting rats, myna birds and Merremia peltata vine. Samoa's National Adaptation Programme of Action (NAPA) was implemented in 2006 to address climate change, and the National Water Resources Management Strategy (2007-2017) promotes the control, management and protection of water resources. However, a number of challenges impacted progress. These include:

- Comparable and consistent data on the actions implemented are being collected for several responses like the protected area coverage (Aichi Target 11), but lacking in many others. For example, although mainstreaming biodiversity into national and sector-level plans, policies and processes is essential to improving biodiversity outcomes, it remains challenging to monitor progress across countries in a comparable way. There are also gaps in selection of positive incentives (Aichi Biodiversity Target 3).
- Establishing specific and measurable quantitative targets for the post-2020 framework for improving the ability to monitor progress is pending.
- A key challenge in monitoring aggregate progress towards the 2011-2020 Aichi Biodiversity Targets has been the lack of comparability across national-level indicators. While the CBD Indicator Framework lists 98 indicative indicators for use the NBSAP has lacked a monitoring framework and itself has not been monitored since it was adopted in 2001. This gaps presents a major constraint to assessing NBSAP's effectiveness.
- As of now, huge amount of data and information gathered over a period by the SPREP, and government ministries in Samoa and others exist in electronic pdf format. There is

a need to improve the range and quality of data available by harnessing new and innovative Open Access information and communication technologies (ICTs) and approaches (e.g. citizen science, artificial intelligence and earth observation) not only for monitoring and analysing data but also for involving women, youth and larger communities in data collection and analysis and making them available to them as some of them may have limited literacy and numeracy skills, reading abilities or access to these institutions.

A summary of progress against the Aichi Biodiversity Targets that were to be achieved by 2020 (except 10, 16 and 17, which were to be achieved by 2015) is given below:

i. Targets on **track** that were **likely to be achieved** if ongoing efforts were to be continued:
   - *Target 4:* Governments, business and stakeholders at all levels have taken steps to manage production and consumption to keep ecological impacts well within limits.
   - *Target 6:* Sustainable management of fish and invertebrate stocks and aquatic plants using ecosystem based approaches to avoid loss, improve recovery of depleted and threatened species and vulnerable ecosystems, and to keep impacts of fisheries on stocks, species and ecosystems within safe ecological limits.
   - *Target 14:* Ecosystems that provide essential services (water, and those contributing to health, livelihoods and well-being), are restored and safeguarded incorporated needs of women, indigenous and local communities, and the poor and vulnerable.
   - *Target 16*: The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is applied consistently with national legislation.
   - *Target 17*: A policy instrument is being implemented and the national biodiversity strategy and action plan is kept updated.
   - *Target 18*: Traditional and indigenous knowledge relevant for the conservation, and their customary use of biological resources, are respected, integrated in national legislation and the implementation of the CBD with the full and effective participation of indigenous *and* local communities, at all relevant levels.

ii. Targets with **mixed** progress that could have been **achieved with additional efforts**:
   - *Target 1*: Public education and participation in conservation.
   - *Target 2*: Biodiversity values integrated in national development planning and incorporated into national accounting, as appropriate and reporting systems.
   - *Target 5*: The rate of loss of all natural habitats at least halved or brought to zero and degradation and fragmentation significantly reduced.
   - *Target 7*: Sustainable agriculture, aquaculture and forestry to ensure conservation of biodiversity.
   - *Target 8*: pollution, including from excess nutrients, are not detrimental to ecosystem function and biodiversity.
   - *Target 11:* At least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved and integrated into the wider landscapes and seascapes.
   - *Target 19:* Knowledge, science base and technologies relating to biodiversity managed, improved, shared, transferred and applied to address biodiversity loss.

- *Target 20:* Financing resourcing of the national biodiversity plan improved based on resource needs assessments to be developed and reported by the state party.

iii. Targets significantly **lagging behind** and were **not likely to be achieved** by 2020:
- *Target 3:* Incentives, including subsidies, harmful to biodiversity eliminated, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied taking into account socio-economic conditions.
- *Target 10*: Multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification minimized.
- *Target 12*: Extinction of known threatened species prevented and their conservation status, particularly of those most in decline, has been improved and sustained.
- *Target 13*: Genetic diversity of cultivated plants and farmed and domesticated animals, and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies applied to minimize genetic erosion and safeguard genetic diversity.
- *Target 15*: Ecosystem resilience and the contribution of biodiversity to carbon stocks enhanced through restoration, including restoration of 15 per cent of degraded ecosystems.

It would be possible to know how far these targets were actually met by 2020, but only after another round of monitoring data are collected and analysed.

(e) Mechanisms for National Implementation (legislation, funding, capacity-building, coordination, mainstreaming, etc.)

At the sectoral level, biodiversity mainstreaming is advanced in legislation and policies related to forestry, water resources, fisheries, urban planning, as well as tourism and education (which both highlight the importance of biodiversity and environmental sustainability in their Master Plans). In addition to efforts being taken in sectoral planning, biodiversity integration at the projects and activities level is also noteworthy. Agriculture continues on a path of increased genetic diversification in crops and domestic animals, with new species and varieties being introduced to improve yields, disease resistance and export prospects. Cross-sectoral integration is advanced in certain areas, including environmental impact assessments (EIA Regulation, 2007), waste management, land management and climate change adaptation but more needs to be done as a cross-cutting considerations in all planning activities. Notwithstanding these development, national capacity is restricted by several factors to make effective changes and impact. These include:

- While there are several tools to generate and compile information on biodiversity data and trends (e.g. GIS-based data management system, village level monitoring of the network of village-based fisheries reserves), monitoring of species remains project-based (e.g. monitoring of the sheath-tailed bat and the Hawksbill turtles) and a policy as a whole does not get reviewed.
- MNRE has proposed the development of an NBSAP monitoring plan with relevant and measurable indicators, as well as commitment to its regular implementation. However, progress on this proposal is affected due to gaps in capacity and resources.

1.2 Target groups

Biodiversity is critical for survival and prosperity of Samoan people. The *natural capital* is recognized as an inalienable part of Samoa's tradition-derived identity. Vulnerable populations and specific groups within the population clusters are exposed to social and biophysical stressors, but have limited capacity to mitigate them or access to foras to influence decision-making. Poor education and awareness and information about consequences about ecosystem degradation means that they continue to ecosystem services in a way that contributes to degradation.

The enormous variety and complex interactions between ecosystems and village-life have important impacts on **women** and **young people** as on the village. However, the traditional governance institutions do not always allow women and youth to be part of discussions and solutions or even while they do play a role in keeping ecosystems functional and economy using natural resources productive.

Women have care responsibilities and often lack decision-making ability beyond household and care responsibilities, where they do usually have significant say. However, this situation caries across social groups and women in upper echelons of society do not face this hindrance. Social issues around participation of women and youth, persons with disabilities and minorities is nuanced by marital and social status, and age.

At the national institution level the gender realities are reversed since a large number of public service positions and executive leadership positions of ministries and state bodies are occupied by women.

Youth face greater issues in accessibility, particularly, those in rural areas and from **poor households** without access to information and transportation options. Persons with disabilities also face similar situation. The traditional roles ascribed to youth and gaps in empowerment among **persons with disabilities** do not prepare them for participating publicly in activities involving social decision-making. None of the three groups, women, youth and persons with disabilities are encouraged to lead resulting in a combination of lack of self-esteem and or public participation abilities. Similar situation is faced by faʻafafine and faʻafatama (Samoan sexual/**gender minority**) who too are traditionally ascribed care responsibilities. It results, among other consequences, also in limited knowledge about the biodiversity and their roles. Some other challenges facing these groups of people and that affect their participation include functional literacy and numeracy, use of English or availability of resources only in English and accessibility to communication channels.

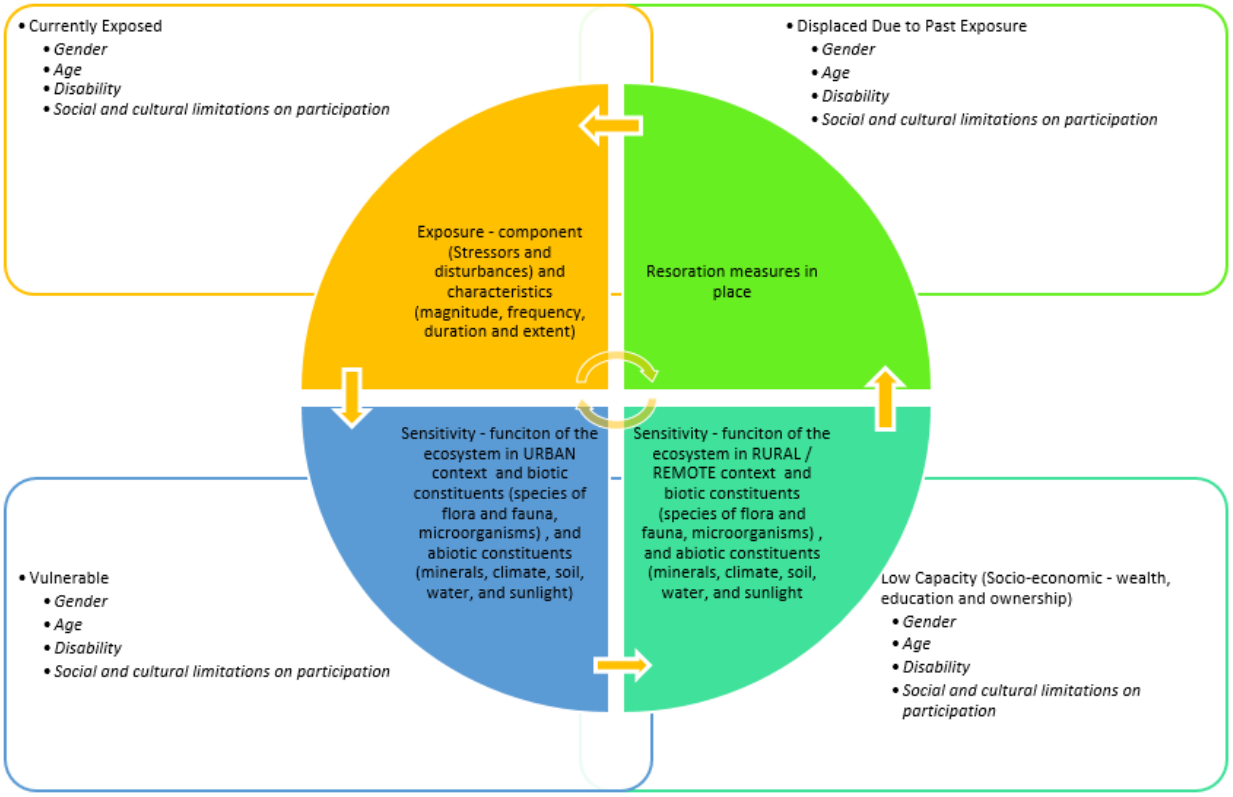
The COVID-19 pandemic is a reminder of the close relationship between human and planetary health and also an important reminder to deliberately engage **remote rural and forest-dwelling communities**. The shrinking mangrove and wetlands cover present consequent impacts on livelihoods, water supply, food security and resilience to extreme weather events of these groups. These groups living in Savai'i, Manono, Apolima and Upolu, often rely on ecosystems and the goods they produce to make a living instead of food imports and other goods produced offshore.

Environmental advocates have long-raised the issues around alteration of land use–for settlement, agriculture, logging, and construction that encroach into natural habitats. The gradual loss of mangroves has resulted in destruction of the natural buffer zones that would normally kept the coasts and terrestrial resources safe, allowed the proliferation of species

and created sustainable fishing foraging opportunities for people, An immediate and most visible impact is on health and nutrition of the people.

The above-mentioned articulation of the target groups will be confirmed during implementation using a simple method of participatory analysis (See figure 1) of vulnerability mapping and deliberate efforts to engage the identified target groups in the planning, operationalization and review of the UNJP on Ecosystem Services.

Figure 1: Vulnerability Mapping for Leaving No One Behind



1.3 SDG targets

Many of the indicators for the SDG 14 and SDG 15 targets remain classified as Tier 3[6] or the methodology has been finalized only recently. This tier implies that "no internationally established methodology or standards are yet available or existed until recently for the indicator" and therefore repository of data for tier 3 is not yet created. This challenge was

[6] The work plan for the tier III is available here.
Tier Classification Criteria/Definitions:
Tier 1: Indicator is conceptually clear, has an internationally established methodology and standards are available, and data are regularly produced by countries for at least 50 per cent of countries and of the population in every region where the indicator is relevant.
Tier 2: Indicator is conceptually clear, has an internationally established methodology and standards are available, but data are not regularly produced by countries.
Tier 3: No internationally established methodology or standards are yet available for the indicator, but methodology/standards are being (or will be) developed or tested. (As of the 51st session of the UN Statistical Commission, the global indicator framework does not contain any Tier III indicators).

faced by the interregional UN resident coordinator offices' economists' team from the SIDS working with the Sustainable Development Solutions Network (SDSN) to develop the *Multidimensional Vulnerability Network* (MVI). The complicated nature of social and economic systems related to ocean and terrestrial biodiversity and the complex ecosystems within them means that governance including monitoring and management of interventions is a huge challenge. Yet progress towards SDGs 14 and 15 is critical precisely for the same reasons.

The only data available for SDG 14 in Samoa are related to indicators 14.5.1 is protected marine area (Exclusive Economic Zones, which was 2.3 sq. km in 2018, of which 0.0% of the marine environment was under protection, and 2.4% of which included Marine Key Biodiversity Areas in 2019). Methodology for SDG 14.2 target was developed by UNEP in cooperation with IOC-UNESCO as recently as Dec 2020. Data is to be collected by joint survey/compilation with national agency and international entity and reporting to UNEP. This data collection will have 3-5 year cycle. Similarly for SDG 15.9, the data collection began with the sixth national report to the CBD in 2018. Samoa reported in 2019.

Overall, the UNJP on Ecosystem Services would give policymakers and private sector information and data to help accelerate investment confidently into ecosystem restoration. Protecting biodiversity by accelerating investment in ecosystem restoration has a direct effect on improved biodiversity and that in turn has a direct impact on SDG 5 (gender equality) and SDG 4 (education). In the Samoan context, biodiversity loss and degraded ecosystems often contribute to rural to urban migration and bring hardships and challenges in income generating activities for women and education for children. Additionally, this UNJP would indirectly contribute to meeting the following SDG targets:

- *SDG 2:* End hunger, achieve food security and improved nutrition and promote sustainable agriculture, specifically,
    - *Target 2.4:* By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.
- *SDG 3:* Ensure healthy lives and promote well-being for all at all ages, specifically,
    - *Target 3.9*: By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination
- *SDG 6:* Ensure availability and sustainable management of water and sanitation for all, specifically,
    - *Target 6.6:* By 2020, protect and restore water related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes.
- *SDG 11:* Make cities and human settlements inclusive, safe, resilient and sustainable, specifically,
    - *Target 11.6:* By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management
- *SDG 12:* Ensure sustainable consumption and production patterns, specifically,
    - *Target 12.2:* By 2030, achieve the sustainable management and efficient use of natural resources
    - *Target 12.*4: By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment

- *Target 12.7*: Promote public procurement practices that are sustainable, in accordance with national policies and priorities
- *Target 12.8*: By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature

- *SDG 13*: Take urgent action to combat climate change and its impacts, specifically,
  - *Target 13.b:* Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities …
- *SDG 17*: Strengthen the means of implementation and revitalize the global partnership for sustainable development, specifically,
  - *Target 17.18:* Target 17.18: By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts.

Table 1: Key SDG Targets, Indicators, Trends, Baseline and Methods for monitoring

SDG	Target	Key indicator	Trend Baseline & Year	Method
14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development.	14.2: By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans.	14.2.1: Proportion of national exclusive economic zones managed using ecosystem-based approaches (EbA).	Samoa adopted an Ocean Policy in 2020, which promotes integration of EbA) in existing climate change adaptation management plans and initiatives. No quantitative data as of 2020.	Exploration of an opportunity and encouragement to MNRE, SROS and CSO partners to pilot the use of approach.
15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss[7].	15.1: By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.	15.1.1: Forest area as a proportion of total land area. 15.1.2: Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type.	Forest declined from 60.5 % in 2000 to 57.1% in 2020. No previous data to see the trend. 13.7 % in 2019.	NBSAP monitoring; State of Conservation report; CBD report.
	15.4: By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development.	15.4.1: Coverage by protected areas of important sites for mountain biodiversity. 15.4.2: Mountain Green Cover Index.	No previous data to see the trend. 18.3 % in 2019. No ranking / data as of Aug 2021.	NBSAP monitoring; State of Conservation report; CBD report.

[7] UN Stats, New York. Available at https://country-profiles.unstatshub.org/wsm#goal-14. Accessed 24 Aug 2021. Other sources are mentioned in-line; click on the hyperlinked words to check.

SDG	Target	Key indicator	Trend Baseline & Year	Method
	15.5: Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species.	15.5.1: Red List Index	Almost stagnant since 1993. 0.76 in 2020 (check Series_ER_RSK_LSTI)	IUCN assessment report.
	15.8: By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species.	15.8.1: Proportion of countries adopting relevant national legislation and adequately resourcing the prevention or control of invasive alien species.	Invasive Alien Species Management Plan 2016-2020. NBSAP 2016-2020. Resourcing largely through aid-assisted project.	Report of Invasive Alien Species Survey. Report of assessment to be done by SROS.
	15.9: By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts.	15.9.1: Progress towards national targets established in accordance with Aichi Biodiversity Target 2 of the Strategic Plan for Biodiversity 2011-2020.	Incremental progress since 2016 but no comprehensive review of the NBSAP to assess progress.	The Seventh National Report to CBD due in 2022.
	15.a: Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems.	15.a.1: Official development assistance (ODA) and public expenditure on conservation and sustainable use of biodiversity and ecosystems.	ODA for biodiversity increased from 0.2 million dollars in 2002 to 0.4 million in 2018.	ODA reports from the Ministry of Finance.

1.4 Stakeholder mapping

Stakeholder landscape:

Apart from MNRE, Scientific Research Organization Samoa (SROS) and the Samoa Bureau of Statistics (SBS), a number of NGOs, regional organizations and international organizations play important roles in biodiversity in Samoa. However, not all are currently involved in ecosystem services or likely to be present in Samoa at the time of implementation. Their past work or ability to contribute to processes should be kept in view in the course of implementation.

(a) NGOs: Non-government organizations such as the IUCN and Samoa Conservation Society (SCS) are major stakeholders in the area of natural conservation. At present, the Samoa Umbrella of NGOs (SUNGO) is involved in implementation of a marine programme with the IUCN. The O le Siosiomaga Society Incorporated (OLSSI) and Women in Business Development Inc. (WIBDI) other NGOs implementing environmental and agro-projects. Overall, their roles vary from one-another from monitoring the state of conservation and species, and taking specific measures to promote biodiversity to marketing of agricultural produce.

(b) Regional Organizations: The Secretariat of the Pacific Regional Environment Programme (SPREP), since its establishment in 1993, has played a crucial role in nature conservation and biodiversity. SPREP serves as the Secretariat of the three environment related regional conventions, namely, Noumea Convention, Waigani Convention and Apia Convention. Another regional organization with a policy role is the Pacific Community (SPC), which is currently not present in Samoa.

(c) International organizations and IFI(s): Biodiversity related issues have been among UN concerns since the supra-national system was set up. Among the UN Organizations Food Agriculture Organization (FAO), UNEP, UN-ESCAP and UNESCO have standard-setting and policy-planning Organizations of the UN System working in Samoa. FAO focusses on assistance for agricultural diversity. The role of UNESCO since its creation in 1946, in the creation of the IUCN and its continued cooperation in the Pacific offers one of the earliest examples of UN promotion of international cooperation through NGO partnerships. In Samoa, it has been engaged around issues nominations of natural sites for designation as Man and Biosphere[8] Reserve (MAB) and World Heritage Site. Since its creation in 1972, UNEP has been at the heart of the UN's environmental activities. Its work in Samoa has covered ozone depleting substances, and other efforts funded through the Global Environment Facility projects covering marine and coastal management, invasive species and waste management. UN-ESCAP supports Samoa in SDG tracking and along with the World Bank (WB) and SBS played a key role in producing Samoa Water Accounts 2014-2015.

The WB-led WAVES partnership, which is now called the Global Program on Sustainability (GPS), has been attempting to make sustainable finance part of the solution to biodiversity degradation. WB is capable of engaging with the financial sector to support

[8] Coined by geologist Eduard Suess in 1875, the term *biospheres* has biopoiesis (non-living organic compounds) and biogenesis origin and is defined as a closed, self-regulating systems containing all ecosystems where all living beings and their relationships, including their interaction with the elements of the lithosphere, cryosphere, hydrosphere, and atmosphere are interdependent.

a better integration of risks and opportunities associated with natural capital into investment decisions and reporting. This engagement is critical in WB-supported infrastructure development by Samoa and in raising awareness among the financial sector organizations.

(d) SROS: SROS since its establishment in 2006 by the Government of Samoa, has been undertaking scientific research and developing new technologies with the primary aim of adding value to Samoa's local industry. SROS develops prototypes of products and processes for the local or overseas markets, trains researchers and professionals engaged in scientific research. SROS hosts a biodiversity centre to research local flora.

(e) MNRE: MNRE leads the management of Samoa's natural resources and is the policy-drafting arm of the executive on matters pertaining to biodiversity/ecosystems. The Conservation Division of the MNRE acts as an integrative body within the ministry with links to other divisions of the MNRE dealing with land and water resources. This structuring has significantly facilitated biodiversity.

(f) SBS: The SBS among other forms of data and statistics work carries out the Agricultural Survey. It was also engaged in the Samoa Water Accounts 2014-2015.

(g) Others: Several programmes and projects are targeted at protecting or rehabilitating vulnerable ecosystems, such as the GEF Small Grants Programme managed by UNDP, New Zealand AID, the Australian Department of Foreign Affairs and Trade (DFAT) assistance for the rehabilitation of coastal ecosystems, establishment of marine reserves and replanting of mangroves and corals.

Experience Map:

The experience map below identifies what each national and regional stakeholder present in Samoa, and identified for implementation partnership and collaboration[9], provides to ("gives to") the other stakeholders. At the intersection of the column and row of the same stakeholder, the intrinsic motivation of the relevant stakeholder is being reflected in connection with the scope and the objectives of the UNJP on Ecosystem Services as well as their own institutional mandates, areas of interests and assigned roles. This analysis will inform the approach to partnerships during implementation:

[9] NGO partners will be involved in capacity building, awareness raising and coordination of community level engagement. Any financial engagement will be in accordance with PUNO's partnership selection process and financial rules.

Table 2: Experience Map

Institution	SROS	MNRE	SBS	SPREP	IUCN	SCS	SUNGO	WIDBI	OLSSI
SROS	Scientific research and technological development for sustainable development	Research inputs, plant gene testing	Scientific data	Contribution of regional policy and planning	Data on river water quality	Research reports	Traditional knowledge of ecosystem	Technologies that sustain and add value to our goods and services for market	Traditional knowledge of ecosystem
MNRE	Partnership for research, testing and data analysis opportunities	Policies, laws and project for environmental conservation and biodiversity management	Ecosystem data	National partnership for regional projects and data	Partnership on marine spatial planning	Partnership for CBD reporting	Projects to implement at the community level	Assistance for organic production	Projects to implement at the community level
SBS	Wider data sharing opportunities and availability of data for development planning	Complementary opportunity to use data beyond reporting against Multilateral Environmental Agreements (MEAs)	Statistical information and services	Opportunities comparing country-level data and statistics	Data of endangered species	Education and training collaboration	Data and analysis to inform advocacy	Information and data on market trends	Data for evidence-based planning
SPREP	Regional expertise on the technical and policy aspects	Environmental data management and support	Capacity building support	Assist Samoa in order to protect and improve its environment and sustain nature for future generations	BIOPAMA and joint conservation projects	Joint conservation projects	Capacity development	Data to inform export planning	Projects to address invasive species
IUCN	The IUCN Red List of Threatened Species	State of conservation and measures needed to safeguard it and ocean strategy	Exclusive Economic Zone marine data	Partnership for conservation and implementation of the regional conventions	Bringing together experience, resources and reach of governments, CSOs and experts to	Protection and restoration of at least five endemic birds	Awareness raising about marine spatial planning in communities	Natural coastal resource information for product planning	Coastal reef restoration information

Institution	SROS	MNRE	SBS	SPREP	IUCN	SCS	SUNGO	WIDBI	OLSSI
					determine status of natural heritage and state of conservation				
SCS	Sharing knowledge about species in Samoa	Implementation support and reporting assistance	Participation in voluntary national reporting	Joint implementation of environment projects	Projects to save threatened species of plants and birds	Environmental education, capacity building and nature conservation	Awareness and capacity building	Information and advice on conservation needs	Partnership for projects
SUNGO	Community outreach	Coastal community participation in Marine Spatial Planning	Qualitative information on communities	Partnership and coordination with CSOs	Engaging CSOs in Marine Spatial planning	Coordination and awareness-raising	Improve coordination among CSOs and Samoa including with the Faalapotopotoga Atinae o Komiti Tumama o Samoa (or the Women's Committee Development Organization)	NGO coordination	NGO coordination
WIDBI	Support for traditional knowledge for sustainable production	Support for conservation	Market data	Community level experience to inform planning	Support for organic agro practices	Joint advocacy	Cooperation with NGOs involved in village level production	Strengthening village economies and promote fair trade	Information sharing and coordination at the village level
OLSSI	Participation in projects for reduction, elimination and monitoring of persistent organic pollutants	Support in monitoring of suspected sites	Participation in climate public expenditure data collection	Implementation partnership	Support for endangered bird conservation	Implementation partnership	NGO coordination	Information sharing and community coordination	Promote integration of the sustainable development and environmental concerns in national development policies

Programme Strategy

2.1. Overall strategy

Main strategy:

Transformational effort:

This UNJP on Ecosystem Services will include assessments, data and policies that would clarify the influence of complex human-nature interactions on one another and impacts on functioning of the ecosystems as well as biodiversity. It would advocate for developing sustainable solutions to these issues. The UNJP PUNOs and partners, SROS, MNRE and SBS will be applying cutting-edge integrative approaches that are SDG-driven, databased, and synthesis-oriented. Their efforts to link natural and social interactions in a transdisciplinary would help the communities see the impacts and trade-offs of unsustainable use of the ecosystems.

The UNJP on Ecosystem Services would provide a platform for providing access to unique research infrastructure and data and fostering networking among stakeholders. In doing so, it would assist in transferring integrative knowledge to the inter-institutional stakeholders, and inter-island community members, in particular women and other marginalized groups.

Approach:

The UNJP's communication on its outputs and community outreach during implementation will be participatory and focussed on human well-being, which is a composite of multiple factors, including:

- Basic elements for a good quality life, such as secure and adequate livelihoods, enough food at all times, shelter, clothing, and access to goods; health, including feeling well and having a healthy physical environment, such as clean air and access to clean water;
- Equitable social development, including social cohesion, gender equality mutual respect, and the ability to learn from one another;
- Human security, including secure access to natural and other resources, respect of cultural identity, personal safety, and security from natural and human-made hazards, and freedom of choice and action.

Acceleration of SDGs:

The approach mentioned above is to ensure that emphasis on data, statistics and recommendations do not lose sight of the fact that the human-beings are integral parts of ecosystems and that a dynamic interaction exists between them and other parts of ecosystems. These changes are induced in ecosystems by the changing human conditions and which in turn changes its functionality, consistency and quality of services that have an impact on human well-being. This interdependent relationship is broadly understood by the policymakers but rarely used for public education and participation. Realization of key SDG

14 and SDG 15 targets and the agenda of leaving no on behind is dependent on this effort to foster this interdependent relationship (for further details, please refer to Section C.1.3).

The COVID-19 pandemic is likely to have pushed back progress on many of the SDGs. Contributions of freshwater, land and ocean ecosystems to human well-being underpin the achievement of SDGs. Achievement of SDGs in (post-) pandemic era needs to draw lessons from the links between nature-human relationship and examine the setbacks caused by COVID-19 pandemic. This UNJP will bring to the attention of public institutions and public the acute need to address human-made pressures that are leading to degradation of fresh water, land and ocean ecosystems and their services. By highlighting and building a consensus that the risks to human well-being, whether through virus or loss of food, water and clean air, come from the degraded ecosystems caused either due to human interference or inaction in the interest of biodiversity. This UNJP will accelerate achievement of the SDGs by (i) generating data on environment for stakeholders to see the changes in biodiversity over time; (ii) prioritizing pressing issues that require government action to address livelihood and resource security that in the long run should promote human-nature harmony; (iii) genetic safeguarding terrestrial and marine plant species of traditional value; and (iv) enhancing capacity of the government stakeholders' to identify challenges that must be addressed and interlinkages that must be attended for accelerated progress towards SDG 14 and also faster recovery from the pandemic.

National ownership and roles:

The UNJP has been developed at the request of and together with the Government of Samoa received via MNRE and SROS. During the implementation, the PUNOs will use a dynamic framework for strengthening accountability on developing national ownership, strong relationships among stakeholders, and transparent agreement on commitments and the action required to meet them. The PUNOs will be responsible for providing technical assistance and through the UNJP Coordinator, the national institutions will be supported to employ principles of stakeholder engagement, create common understanding of the processes and results and demand for the UNJP outputs. The delivery of the programme will be through the national institutions with sixty per cent of the UNJP funds dedicated for grants and transfers to the partners. The national institutions will be responsible for working within the government and among their policymakers to identify commitments, to collaborate, and to acknowledge policymaker actions, showcase progress, and celebrate success. Together, the PUNOs and the national institutions would identify barriers to and facilitators of accelerating progress for collective ownership and to address bottlenecks.

Engagement with related initiatives:

The UNJP will collect and analyse data that will help see the ecosystem costs and benefits in relation to different human activities in order to protect and conserve biodiversity and its sustainable use. This may include ecosystem services that have a market price (agriculture, fisheries) and services that have currently no market prices (disturbance regulation such as storm surge, flood protection, species interactions, control of invasive species, water flow and water quality regulation that causes a pronounced change in an ecosystem and help it rejuvenate). The precise prioritization will be done during the course of implementation to

ensure that it has participation of all stakeholders involved in these areas. The project will also use a strategy of co-option and alignment where similar work is being done (for example, marine spatial planning by IUCN) or is initiated while the implementation is on to upscale and enhance results.

Added value of the UN:

The PUNO involved in this UNJP have a specific role in global and regional SDG monitoring. UNESCAP supports the 2030 Agenda across Asia and the Pacific. It will bring to the UNJP ecosystem accounting approach for selected coastal and marine ecosystems and experience as the co-chair of the Global Ocean Accounts Partnership. UNEP and UNESCO are leads for most of the SDG targets, institutional co-sponsors of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), and implement actions for addressing rapid decrease in biodiversity, ecosystem destruction and degradation, pollution, the introduction of non-native species and over-exploitation of natural resources, and climate change. UNEP brings to the table its pre-existing partnership with the regional organization, SPREP to support MNRE, and UNESCO brings its collaboration with SROS to bring the focus on key Aichi targets that have not been met as well as traditional knowledge ecosystems.

Leaving no one behind:

The UNJP on Ecosystem Services will be deliberate in selection of participants in its consultations, trainings and other activities to ensure that the groups of people in vulnerable contexts as specified in Section A.14 and elaborated in Section C.1.2 benefit from the project and related negotiations are carried out with the village committees to ensure that women and youth are included in community level data collection and actions. Civil society partnerships will carry specific obligations to ensure that gender-equity is seen as a key element of biodiversity related decision-making.

The UNJP will also adopt a capacity building approach to communication and community outreach to ensure that the essential concepts and methods relevant to the interrelationship between biodiversity, ecosystem functioning and ecosystem services are being communicated to people based on realities of their own context.

The combination of participatory methods, expert knowledge and techniques to design, implement and monitor ecosystem services at different scales will provide the necessary tools to approach the impacts of biodiversity loss in the context of ecosystems services as well as ensure that those vulnerable gain and have opportunity to apply this knowledge participate activity in decision-making within their socio-economic contexts.

PUNOs and the alignment with the UN Pacific Strategy:

The added value of the UN and specific roles that UNESCAP, UNEP and UNESCO play in the implementation of the Outcome 1 of the UN Pacific Strategy makes the UNJP an ideal fit both in terms of partnerships within the UN and also for the realization of the Outcome 1, which seeks to achieve the following result: By 2022, people and ecosystems in the Pacific are more resilient to the impacts of climate change, climate variability and hazards; and environmental

protection is strengthened. UNESCAP is involved in three indicators of this expected Outcome while UNEP and UNESCO are involved in all five indicators.

The three PUNOs facilitate and convene a range of foras and thematic processes in the Pacific concerning biodiversity within the framework human rights, 2030 Agenda and international biodiversity instruments mentioned in Section A.15.

All three PUNOs play and important role in supporting capacities of national authorities in Samoa and regionally [and globally] and support and cooperate with the regional organizations for data and statistics that is needed for report against SDGs as well as for evidence-based policy-making. They also have a track-record of forging enduring partnerships with regional organizations for optimizing the results included in the UN Pacific Strategy as well as in their own specific areas of work.

The three PUNOS are important providers of technical expertise, scientific advice and inclusive development. The UNJP is giving the three PUNOs an opportunity for collaboration in an important area in Samoa bringing together their ongoing efforts with the national stakeholders and SPREP towards commonly agreed results. For example, MNRE, SPREP and UNEP have a long-standing partnership to strengthen national capacity for the collection, management, assessment and use of environmental data to improve planning and reporting for informed environmental governance and contribute towards sustainable development.

2.2 Theory of Change

Summary:

This theory of change is premised on a concept that biosphere management and policy efforts must be data and evidence-based and enhance conservation by focusing on human behaviours and decision-making, governance structures, and other social drivers. Ecosystems deliver multiple ecosystem services, and their functional integrity is a determinant of well-functioning biosphere that in turn is critical for human well-being. Biodiversity has the potential to increase ecosystem functioning and enhance its services. However, there is degradation in key ecosystems, particularly due to past and present climate, and marine- and land-use changes. Threats to biodiversity have never been higher also because women and marginalized communities are absent from the discussion.

While these broad patterns are visible, availability of consistent, coherent and comparable data, and qualitative and quantitative analysis to inform policy options, implementation changes and investment decisions, are missing. Specific actions to produce outputs that will create a strong case to reduce loss of biodiversity, and build a relationship between biodiversity and the delivery and stability of ecosystem services at one end and between biodiversity and human well-being at the other would have both short- term outcomes supportive of changes in human behaviour and policy- and implementation frameworks.

Such outcomes would support long-term positive impacts and would induce societal benefits, an interest in bearing the costs and trade-offs that are inherent in the conservation of biodiversity and maintaining well-functioning ecosystem services.

Detailed explanation:

Process: The theory of change was developed and validated in three stages: first, individually with the key national stakeholders in one-on-one sessions by UNEP and UNESCO; secondly, a review and further elaboration together with all potential partners and PUNOs; and finally, validation in the formal consultations.

Problem statement: The analysis of the context for the UNJP on Ecosystem Services and the issues that form the rationale for this UNJP include the fact that while biodiversity is considered critical, its project-based implementation has affected system wide data-collection, monitoring and evidence-informed remedial actions. Where problem analysis is done, it is often limited to biophysical aspects of the ecosystem in pockets where projects are being implemented and not to how it affects broader ecosystems, conservation, genetic diversity, consumption by populations and impacts on various groups of people, including women, girls, persons with disabilities, remote and minority populations. Critical ecosystems of forests, water, coast and reef, among other are being degraded fast while genetic diversity is disappearing due to unsustainable practices and also climate change. Communities are involved in project implementation and the government has community communication strategy but public education and behaviour change have not be systematically pursued. Data exists in silos while efforts are needed to bring them together, fill gaps and produce analysis that build a case for sustainable use and conservation of biodiversity as determinants for human well-being and inclusive growth. The problem statement must not be forgotten after the planning. Rather, it should be kept in purview throughout the result-chain to enable "backwards mapping," beginning with the impact that the stakeholders want to see and working back towards earliest plans, activities, outputs and outcomes to confirm the causal logic, as well as, to see the influence of a collaborative process at all levels of the result chain on impact. This non-linear process is also critical for probing assumptions and taking corrective actions.

Pathways to change: Technical capacity enhancement and institutional strengthening efforts, assessments, policy analysis and data and statistics for monitoring long term changes, scaling up and improving knowledge, practices or policies that require strategies and budget allocations would benefit from the short-term gains in knowledge, attitudes and skills. Awareness and engagement of stakeholders, communications and networks, therefore will be as important contributions to the desired impact that would result in ecosystem conservation and sustainable management of biosphere and inclusive development for the people. Therefore, the UNJP sees the need to plan backwards from this desired impact.

Outcomes: by improving policies and plan for provisioning, regulating, cultural and supporting ecosystem services, the Samoan stakeholders will be able to move towards a long-term sustainable change without hindering economic growth of the country. By improving data and supporting the evidence base the policymakers will be able to demonstrate positive outcomes from investment in ecosystem restoration in nutrition, health, water quality and human settlement, environment and coping with impacts of climate change and build a case for sustainable policy and investment. By enhancing capacity for valuation of natural capital and ecosystem services, the stakeholders responsible for producing outputs, together with well-informed communities and women and youth, will have the capacity to influence policy and

investment direction in favour of gender-equitable and inclusive policy outlook, implementation approaches and business interest in ecosystem services.

Outputs: The outcomes of the UNJP, will be built on outputs produced through a process that recognizes that social system and ecosystem intersect and create social, ecological, and economic opportunities for restoring ecosystems. The first outcome will be built on: Samoa's Environment Outlook and a Targeted Response Framework that will make the link to social dimensions; capacity support for national systems to enhance ecosystem services that will help strengthen institutional capacities for management and evaluating policy options to help identify and redress interdependent needs of the social system and ecosystems; data and safeguarding practice outputs that would help prevent genetic extinction of known threatened species and support inclusion promoting a holistic community-based approach that is inclusive of women and girls for better societal outcomes; and the policy toolkit that will help improve Samoa's capacity to move towards improving business interest in protecting genetic diversity. The second outcome will be built on: improved national capacity for producing and managing data and availability of comparable and consistent data that will not only support monitoring but also help inform other sectoral policies and plans for mainstreaming ecosystem considerations in them. The third outcome will be built on the capacity for setting up and managing the ocean account that will help decision makers in the private and public sectors understand the long-term implications of their decisions on structure of the ocean economy and the condition of the marine environment.

Activities: Mapping of actors, stakeholders and their contributions to one-another suggests that they are receptive of collaboration and willing to use their comparative advantages for activities to improve evidence base, capacities of the national stakeholders, policy frameworks investment-case, and participation and inclusion for achieving optimum ecosystem services.

Assumptions:

The theory of change makes four assumptions, a change in any of which would affect the theory of change:

- PUNOs and partners will prioritise gender equality and youth participation, public education and community outreach.
- Restoration of damaged ecosystems, in particular those of national and international importance, will be seen as increasingly important to ecological functioning by the communities, including women and youth.
- Policy- and decision-makers, based on experience of social and economic impacts of loss of biodiversity, would have increased appreciation of ecosystem services and will be increasingly motivated to improve evidence base to seek remediation of major environmental problems or recovery of ecosystems.
- The reality of over-dependence on imports made evident by COVID-19 pandemic has created greater emphasis on locally sustainable economic development keeping biodiversity in the centre and communities will understand the needs for short-term to long term changes and would know the trade-offs of consumption without consideration to long term sustainability.
- Institutional stakeholders, including women led private sector entities, who are main mechanism for change will be see restoration as feasible and worthy of efforts given limited financial resources and use their influence to public behaviour and equitable

participation of marginalized and those affected by ecosystem degradation in the change process.

These assumptions will inform the risk management strategy and kept in view during monitoring, including reported through interim monitoring reports.

Please see Annex 3 for the diagram of the theory of change.

2.3 Expected results and impact

2.31. Overview:

Biological diversity is a prerequisite for the long-term capacity of ecosystems to provide ecosystem services, which are essential to our well-being. Both public and private actors are directly or indirectly dependent on ecosystem services, rural/forest and natural resource-dependent communities more so. The inclusion of ecosystem services in social planning and business development is becoming increasingly urgent with the on-going loss of biodiversity but there remains major gaps in data availability, analysis of existing data for their economic and societal links and consequences and public communication of impacts and needed behaviour change at the institutional and community levels. These gaps can be grouped into three areas: systems and measures, actions focussed on Aichi Targets, which are equally critical for SDG 14 and SDG 15, and support services.

The UNJP on Ecosystem Services will have the following three outcomes that contribute directly to the envisioned impact with capacity building, gender equality and inclusion as cross-cutting priorities running through the actions:

1. Strengthened policies and plan for provisioning, regulating, cultural and supporting ecosystem services by 2024 for the recovery of sustainable tourism, agriculture and fisheries from the impacts of COVID-19 pandemic and other relevant phenomena, such as extreme weather events.
2. Environmental data and information analysed, evidenced based approaches developed and adopted by 2023 for the benefit of green, blue and circular economy.
3. Capacity for valuation of natural capital and ecosystem services using quality and consistent data using System of Environmental-Economic Accounting (SEEA) Ecosystem Accounting methods enhanced by 2024.

This project's partnerships are at five levels that would allow it to work and have influence at all levels:

1. communities (to be selected),
2. islands (Apolima, Manono, Savai'i and Upolu),
3. national institutions (MNRE, SROS, SBS and others) and national civil society organizations[10] (CSOs like SCS, OLSSI and WIDBI),
4. regional organizations (SPREP) and regional CSOs[10] (IUCN), and
5. International organizations (UNEP, UNESCAP and UNESCO).

[10] CSOs who are to part in this UNJP are to be selected in line with procurement policies of the implementing organizations, or partnerships established through co-option or alignment with their ongoing work.

These multi-tier partnerships will offer opportunities to replicate learning and data drawn from the project both within the country and regionally to other SIDS in the Pacific, as well as, internationally beyond the Pacific.

2.3.2. Results chain:

Outcome 1: Strengthened policies and plan for provisioning, regulating, cultural and supporting ecosystem services by 2024 for the recovery of sustainable tourism, agriculture and fisheries from the impacts of COVID-19 pandemic and other relevant phenomena, such as extreme weather events.

Output 1.1: Samoa's Environment Outlook and a Targeted Response Framework in the form of the National Environment Sector Plan (NESP) 2022-2026 produced to inform support mechanisms such as policies, coordination, and mainstreaming of ecosystem-based approaches in the national development planning.

Activity 1.1.1: Integrate environmental data and the State of Environment (SOE) Reports findings into the national planning documents (Budget: US$ 80,000).

This activity will follow Activities 2.1.1 and 2.1.2 on technological systems and SoE report production. The findings from the SOE Report and data from the Samoa National Environment Portal will be used to create Samoa's Environment Outlook and a Targeted Response Framework in the form of the National Environment Sector Plan (NESP) 2022-2026. The NESP will serve as the roadmap for the environment sector to achieve national environment, climate change and disaster risk management priorities articulated in the Strategy for the Development of Samoa (SDS).

The drafting of the NESP will be carried out under the oversight of the National Environment Sector Committee coordinated through MNRE. SPREP and UNEP are technical advisers to the committee. The review of the current NESP will draw from the SOE Report findings. The formulation of the new NESP will be carried through a participatory process using thematic working groups, community consultations and national validation workshops where specific attention will be placed to ensure actions critical for leaving no one behind and gender transformation are included. This may include dedicated sections/sub-sections in the NESP, affirmative actions to give participation opportunities to women and girls, persons with disabilities in the thematic working groups, and dedicated sessions during consultations. The MNRE has developed a national environment indicator reporting system (NEIRS) aimed at centralizing key environment indicators. The NEIRS will be reviewed and updated as part of the NESP process. This review will include the identification of feasible options to merge the NEIRS and the SPREP indicator reporting tool to suit MNRE's reporting purposes at the national, regional and international levels as well for their inclusive reporting. Sub-activities under this activity would include trainings on the use of the tool based on needs of the stakeholders.

Output 1.2: National systems and measures to enhance ecosystem services have improved preparedness to collect and analyse SDG 14 related data and policy-measures to accelerate progress against SDG 14 targets in a gender responsive manner.

Activity 1.2.1: Hold two workshops based on ESCAP's SDG 14 Accelerator Methodology over the course of the two years to catalyze the delivery of SDG 14 targets (Budget: US$10,000).

UN ESCAP has developed an accelerator approach for the implementation of SDG 14, optimizing development benefits aligned to national priorities though the identification of pivotal interventions with a positive multiplier effect. The methodology helps identify challenges and issues related to the delivery of SDG 14 targets. The interconnection of these challenges exposes the need for holistic approaches where the strategic allocation of resources could have a positive accelerator effect with appropriate technical needs identification, and the implementation of policies that also target gender-role transformation at the community level. The identification of corresponding interlinkages will support government officials in the design and implementation of effective policies, which will result in accelerated outcomes for the delivery of SDG 14, multiplying effects on related SDGs, which will lead to resource and time efficiency and a faster post-pandemic recovery. A local consultant will be engaged to work with MNRE to implement the accelerator approach to its ongoing policy, planning, implementation and reporting processes and documents.

Activity: 1.2.2 (a): Conduct fieldwork in coastal communities to assess the impacts of climate change on marine/coastal ecosystems and livelihoods (Budget: US$10,000).

The Intergovernmental Panel on Climate Change's Special Report on the Ocean and Cryosphere highlighted some observed that the ocean has been warming since 1970, absorbing more than 90 per cent of excess heat in the climate system, doubling the rate since 1993. The ocean has taken up approximately 20–30 per cent of carbon dioxide in the past four decades, resulting in additional ocean acidification. Projected scenarios (RCP 8.5) predict further acidification, an increase of mean sea surface temperature globally, additional marine heatwave days, rising heat content in the ocean water, decreasing ocean oxygen, continued ice sheet mass losses, and consequently, a rising global mean sea level. This could be catastrophic for all, in particular women who are engaged in reef fishing. A local consultant will be engaged to carry out a thorough assessment of the impacts of climate change on marine and coastal ecosystems and livelihoods in Samoa. In addition to currently available data, this exercise will produce necessary discovery for the design and implementation of climate adaptation programmes and initiatives to tackle climate change.

Activity 1.2.2 (b): Collect coastal and marine ecosystem data for monitoring and restoration efforts, support capacity building, in particular, for actions under the current the current MNRE-DEC Management Plan FY2021-2022, and efforts towards validation of information for the State of Environment Reports (Budget: US$ 32,000).

This activity to be implemented by MNRE with UN ESCAP support through an implementation partnership grant, will focus on coastal and marine ecosystem

monitoring and restoration efforts, including coastal and mangrove surveys. This arrangement will provide support to MNRE emphasis on building capacity and knowledge based of critical marine ecosystems and habitats: mangrove, seagrass, coral reefs that are part of the current MNRE-Division of Environment and Conservation (DEC) Management Plan 2021-2022. The monitoring exercise will serve to validate information for the State of Environment Reports and contribute to coastal resource and ocean accounts

Activity 1.2.3: Support MNRE and/or other national stakeholders as advised by the Government, in activities aligned within the Regional Decade Programme for the implementation of the *UN Decade of Ocean Science for Sustainable Development 2021-2030* (Ocean Decade) in Asia-Pacific (Budget: US$ 5,000).

ESCAP, in collaboration with other UN Organizations, is currently developing a Regional Decade Programme to support the implementation of Ocean Decade in Asia-Pacific focused on ocean protection in participation with the governments, civil society, youth, private sector, academia and the scientific community. This particular contribution will be facilitated through Samoa's participation in a gender-equitable manner in the annual Asia-Pacific Day for the Ocean, which was initiated in 2018, which has been also contributing to the planning of the UN Ocean Conference in 2022. The participation will be focused on dialogue and experience sharing, technology transfer, capacity-building and inclusive participation of Samoan stakeholders. The participation may be virtual, in-person or a combination of both depending on the international border situation at the time.

Output 1.3: Data on safeguarding priority genetic resources made available to build a momentum for retroactively pursuing Aichi Biodiversity Targets 12 and 13 on preventing genetic extinction of known threatened species and the genetic diversity of cultivated plants[11] and improving evidence for informing implementation actions under SDG 14 and SDG 15.

Activity: 1.3.1: Research on bio-medicinal values of available Samoan genetic material (both terrestrial and marine) to promote biodiversity conservation (US$ 100,000).

This activity will be implemented through two sub-activities by SROS with support from UNESCO. The first activity will involve screening of the marine and plant materials for their potential to be sources of medicinal drugs. This will also involve identification, purification and determination of mechanism of action in terms of a process as well as a bio-action. This bio-prospecting research would be carried out by local scientists under Samoa's Bio-discovery Centre at SROS and will include equal number of women researchers or more.

The second sub-activity will involve identification of ecological areas that are sources of critical bio-medicinal genetic material to be promoted for conservation and positive

[11] These targets remain priorities areas to pursue in the draft framework under consideration for post-2020.

incentives for the conservation and sustainable use of indigenous genetic resources will be available through the creation/expansion of medicinal gardens in Samoa for biodiversity conservation.

While the above are specifically targeted actions at one category of the terrestrial and marine plants with a specific service for traditional healing practices and connecting these species of plants with modern lab-tested science for future valuation, it is important to note that the process will bring out information on a number of at-risk plants. Genetic diversity in terms of landscapes with different ecosystems and types of nature, different species, and genetic variation within species are a critical measure for resilient ecosystems. This research will be carried out with community participation, specifically, women and remote communities and findings of the report will be shared with them as with the national level institutional stakeholders. This specific effort is also critical to point out ecological sites where ecosystems are not able to adapt and develop due to various disturbances, including human-made, and the efforts needed for the genetic safeguarding of the species. In doing so, this research will make the connection between biodiversity and the long-term ability of ecosystems to provide people with a number of important ecosystem services, and will make the services visible for the policy and decision-makers. This work will be coordinated with a larger national platform, Samoa's Traditional Knowledge Stakeholders Working Group, which comprises of the Ministry of Education, Sport and Culture (MESC), Ministry of Commerce, Industry and Labour (MCIL), Ministry of Women, Community and Social Development (MWCSD), MNRE, the Centre for Samoan Studies at the national University of Samoa (NUS-CSS), Samoa Tourism Authority (STA), SROS, Samoa Qualifications Authority (SQA), and SUNGO.

Output 1.4: Policy preparedness to govern safety, efficacy, regulation and bioethics of research in and use of medicinal plants reached.

Activity: 1.4.1: Development of a policy toolkit comprising of a research report on ethical issues in micro-relationships between science and technology and professional use of herbal medicine and traditional knowledge, and recommended policy and/or legislative actions required to bridge the gap between ethics, research and practice for herbal medicine, which is supportive of genetic conservation and biodiversity, while ensuring compliance with international standards concerning medicinal research and bio-ethics (US$ 40,000).

Plant medicine is part of traditional knowledge in Samoa and has been used over generations. However, studies on their toxicity and efficacy are not available and herbal medicines are not prescribed by the national health system. Its use is based on recommendations by the traditional healers and intergeneration advice from relatives, and friends. With the ecosystem degradation and biodiversity loss many of plan species used traditionally for medicine are becoming rate. It use and commercial or prescribed medicinal use in the current day context would be supportive of the ecosystem restoration and biodiversity, however, to shift what is regarded as medicinal plant in Samoa to a classification of plant herbal medicines requires longitudinal lab-based research as well as comprehensive testing. Even for these plans to be promoted as

complementary and recognised as nutritional products recommended by the certified medical doctors presents a special bioethical challenge in both research and practice for both researchers and certified medical doctors. This factor is an important factor also in using a bio-pharma business model for promoting genetic safeguarding.

Lab-research on herbal medicines in other parts of the world demonstrate a lack of consistency in repeatability and reproducibility of their findings with some establishing efficacy while others pointing out toxicity[12]. Variation occur in men and women, and different age-groups. These variations may also be due variations in geographical locations and other biodiversity elements such as soil, water, etc., some of which may be lab-controllable and some dependent on the larger biodiversity issues of climate change, loss of plant habitat, and disturbance regulation that affect ecosystem services.

While ethical consideration in research may not appear serious to some researchers or to communities who are used to dependency on plant medicine, the research institutions, policymakers and legal entities governing the health systems have to attach the appropriate social value, validity in research, risk benefit ratio and collaborations required for ethical sustainability.

The ongoing COVID-19 pandemic and response efforts, too, have highlighted this debate.[13] In addition, ethical principles such as *beneficence and no malfeasance* because of variance in repeatability and reproducibility cannot be specified by the medical doctors prescribing plant medicines confidently. This in turn has implication for the user/patient autonomy in making an informed decision. SROS and UNESCO have been following through variety of considerations around genetic safeguarding of the plant species as well as their medicinal use. Through the toolkit, therefore, the partnership would provide an essential output to help the Samoan stakeholders walk through these deliberations, required policy and legal measures and institutions for compliance and accountability. For some more details, please see annex 7.

Outcome 2: Environmental data and information analysed, evidenced based approaches developed and adopted by 2023 for the benefit of green, blue and circular economy.

***Output* 2.1**: The national stakeholders have improved capacity to manage range and quality of data available by harnessing *Open Access* information and communication technologies (ICTs), produce reports for meeting national and international obligations and mainstreaming ecosystem-based approaches in the national planning and policies process and documents.

Activity 2.1.1: Hold four capacity building workshops and need-based targeted training for management and use of the Samoa Environmental Data Portal (Budget US$ 50,000).

[12] WHO, Geneva: Available at https://www.who.int/bulletin/volumes/86/8/07-042820.pdf?ua=1. Accessed on 25 Aug 2021.
[13] UNESCO, Paris: https://en.unesco.org/news/place-african-traditional-medicine-response-covid-19-and-beyond. Accessed on 25 Aug 2021.

The Samoa Environment Data Portal was developed and deployed under the Inform project for the management and cataloguing of data is currently under administration by the Inform project team. This includes the hosting (server, data transfer, domain etc.) and ongoing support (software updates, bug fixes, enhancements, site availability, performance, etc.).

A server procured under the Inform Project for the hosting of the Samoa Environment Data Portal built on Drupal, an *Open Source* content management system or DKAN (Drupal-based Comprehensive Knowledge Archive Network). MNRE would like to work with UNEP and SPREP to keep the site hosted and managed with SPREP to ensure sustainability for the future.

SPREP's Inform team would bring capacity building skills to support the MNRE team on data management (cataloguing) and site administration with a focus on two main tools – the DKAN environment data portal as well as the Indicator Reporting Tool (IRT).

MNRE currently hosts a DKIF (Data Knowledge information Facility) which is underutilized. As part of the capacity building process, this activity will include a joint feasibility assessment of DKIF and DKAN to rationalize the two systems and simplify of use by MNRE. The new rationalized system will be implemented on both the MNRE sever and Amazon Web Services (a service for the governments and NGOs) by SPREP and MNRE. This on the job capacity and awareness building combined with dedicated workshops and targeted training would help the MNRE women and men staff to use the system to house and share data and information as well as produce National reports such as the State of Environment and multilateral environmental agreements (MEAs) and SDG reporting. Standard operation procedures will be developed within MNRE to streamline the use of the tool to enhance data management and use. Two national training workshops will be held in 2022 and two in 2023. There will be other smaller specific technical training carried out targeting key users as need requires and deliberate efforts will be undertaken to ensure women staff are benefitting from technological know-how assistance in equal measure.

Activity 2.1.2: Strengthen Samoan government and non-government stakeholders' capacity to generate regular SOE Reports (Budget US$ 88,000)

This activity builds on the existing partnership for the Inform project to produce the SOE Report, which will involve a two-person consultancy team to facilitate this process funded through the Inform Project. This consultancy team would be overseen by MNRE and SPREP and will have the technical backstopping from UNEP. The UNJP on Ecosystem Services will support the Government of Samoa's new direction to adopt participatory approach for analysis of Samoa's current state of environment and formulate Samoa's 4th SOE Report to be published in 2022 and as well as for the process of formulation of the 5th SOE Report. Samoa is required by law to produce regular SOE Reports and these Reports are also used to produce national reports to MEAs including the CBD, UNFCCC, UNESCO World Heritage Committee, and also SDGS and SAMOA Pathway. Support for the participatory approach is critical to ensure

inclusion and active participation of women, persons with disabilities, remote populations and other marginalized groups.

The UNJP would support the implementation of key assessments and surveys to facilitate the development of Samoa's 4th SOE Report such as targeted biodiversity *ground truthing* surveys. Additionally, validation activities will be undertaken as part of the development process including the use of environmental statistic data from the SBS' water, waste and energy accounts.

This activity will be use to draw lessons learned for further refining the SOE Reporting approach. It is expected that assessment and reporting tools will be identified and recommended for the development of Samoa's 5th SOE Report. Data providers (ministries and the public sector) and related stakeholders (private sector, NGO's, community organizations, etc.) will be invited to a write-shop to provide input on the content of the SOE. These non-state national stakeholder from the social and private sectors be able to recommend changes before the report is finalized and published as an interactive online report for improved community communication and public education.

***Output* 2.2**: National stakeholders have comparable and consistent data for mainstreaming biodiversity into national and sector-level plans, policies and processes and for supporting reporting on the 2020 Aichi Biodiversity Targets, which remains due, and Post 2020 Targets.

***Activity* 2.2.1**: Compilation and analysis of data related to a set of ocean accounts for targeted ecosystems (Budget: US$10,000).

The organization of available environmental data and information on coastal and ocean ecosystems into an accounting structure is an important initial step in developing a consistent valuation of natural capital and ecosystem services. UNESCAP will provide technical assistance to MNRE, SBS and SROS on ocean accounting with focus on SEEA Ecosystem Accounting. A local consultant will be hired to support this data compilation work and also other elements of this work under the outcome 3. Compilation of data will be targeted on ecosystems prioritized by the stakeholders in Samoa taking into account the need to include ecosystems on which women and remote rural communities are heavily dependent. This activity will help enhance the use of existing data and the development of various indicators.

***Activity* 2.2.2**: Water quality monitoring of priority river ecosystems that run off into marine ecosystems and community lagoons used for fishing and community recreational activities (Budget: US$60,000).

This activity to be conducted by SROS with support from UNESCO will be conducted to generate monitoring data assess effectiveness of the implementation of the NBSAP as well as to support reporting on SDG 15.

The first part of the activity will be use the following parameters against which water quality will be tested: Physical-Chemical (herbicide, pH, TDS, DO, conductivity) and

Microbiological (faecal coliform, E.coli, Enterococci). This part will involve the priority river sites for monitoring and it is planned that two major river-ways that are yet to be assessed will be covered. This prioritization will be done in consultation with stakeholders, in particular women, who due to their care responsibility are a major stakeholder in fresh water as ocean reef health issues. At present, while some water testing has been done sporadically, there is no baseline data on freshwater ecosystems or confluence sites. The monitoring will cover three sites along each river to be monitored for at least 12 months over both wet and dry seasons.

The second part of the activity will involve identification of developments that may be causing contamination to water ecosystems and the organisms that inhabit them. This will be done through field assessments and mapping. This would be followed by recommendations for river management practices that mitigate detected contamination. This action will be undertaken with active participation to promote behaviour change, addressing the health burden on women and remedial actions by implementers responsible for waste, water quality and water distribution.

Outcome 3: Capacity for valuation of natural capital and ecosystem services using quality and consistent data with the System of Environmental-Economic Accounting (SEEA) Ecosystem Accounting methods enhanced by 2024.

***Output* 3.1**: Pilot extent and condition accounts developed to support efforts for evaluating ecosystem services and trends over time to highlight impacts of pursuing SDG 14 and SDG 15.

***Activity* 3.1.1**: Set up the accounts and hold a national workshop to share and integrate feedback on the pilot an *extent account* and *condition account* (Budget: US$10,000).

A pilot *extent account* and a *condition account* would be set up and used as the basis for the development of physical and monetary ecosystem service accounts. The *extent account* will evaluate the spatial area of the targeted ecosystems. The *condition account* on the other hand, will evaluate the state of the targeted ecosystems based on selected indicators (e.g., coral reef cover, vegetation cover, species composition, etc.). Should available data allow, these accounts would be evaluated to look at trends over-time. UNESCAP with the help of the local consultant facilitate stakeholder discussions on the compilation of the extent and condition accounts (including how the extent and condition accounts may be linked to priority ecosystem services that also support gender equality and inclusion of the marginalized, and hold a national workshop to share and integrate feedback on the pilot extent and condition accounts. This would be carried out in close cooperation with the IUCN and with the facilitation of the MNRE, who has an existing partnership with the IUCN in this area.

***Activity* 3.1.2**: Provide technical support and capacity-building training for the pilot extent and condition accounts development (Budget: US$15,000).

The support will go hand in hand with the activity 3.1.1 with the engagement of the local consultant and to the MNRE, SBS, SROS and other national stakeholders as may

be prioritised by the government. The assistance will include guidance on the application of the SEEA Ecosystem Accounting, review of datasets compiled, and GIS support as needed, virtual training workshops on topics related to the compilation of ecosystem extent and condition accounts and physical and monetary accounting for ecosystem services. This work will be coordinated with the IUCN and efforts will be made to ensure that more than 50 percent of participants are women and youth and are drawn from both government and non-government institutions. This work will support better management capacity in the government and better understanding and communication of ecosystem accounting concepts for community advocacy.

2.4 Financing

The two-year UNJP on Ecosystem Services, involving the three PUNOs, would help foster multi-stakeholder dialogue for ecosystem restoration and support the government through capacity building for continuity of assessments, analysis and reporting against CBD. These actions will help to establish SDG-informed, specifically SDGs 14 and 15, with involvement of the target groups identified, resource planning of public spending on ecosystem restoration and assess the efficiency of past spending. By doing so, Samoa's SDG financing plan will be strengthened and potential of catalysing additional finances towards the achievement of the SDGs 14 and 15 improved. This would also contribute to sustainability of results of this UNJP as well as offer opportunities for upscaling and replicating some of the actions at a larger scale.

This UNJP builds on the partnerships among the PUNOs and the partner organizations to leverage resources. For example, the UNJP will build on work by MNRE, SPREP and UNEP that was initiated through the ACP MEAs Capacity Building programme and more recently over the last four years through the GEF Inform Project. The UNJP will leverage the work done so far for the establishment of the Samoa Environmental Data Portal that serves as the national repository for environment data to be used for evidence based planning, development control and meet reporting obligations as well as environmental information needs at local, national and international level. This information will facilitate sustainable development and the adoption of green, blue and circular economic approaches and this leveraging strategy will bring cost-efficiencies to the UNJP and help deliver it within the allocated resource.

The programme management by the three PUNO's is working on a model to minimize the costs such as personnel by agreeing to have a joint UNV post as a coordinator instead of each PUNO hiring a project manager. The project, apart from leveraging ongoing work, where it is possible, co-opts other stakeholders' ongoing work, which supports alignment and harmonization of actions as well as prevent duplication.

Gender equality principles would be incorporated into all stages the detailed work planning and expenditure planning by the PUNOs and their implementing partners. Work planning process would consider actions needed for gender equality and women's empowerment within the technical activity by paying attention to economic and social matters that are often overlooked. To ensure operational efficiency by achieving maximum value for money priorities of stakeholders at large as well as priorities of women will be considered in equal measure and it is expected that expenditure will be 50:50 on women and men. Participation and

decision-making by women in equal numbers and incorporation of their priorities during implementation will be reported by the implementing partners. The implementation partnership contracts will establish requirements for gender analysis and seek. Given this UNJP will be engage in significant data collection, the requirement for sex-disaggregated data on participation and decision-making at all levels will significantly contribute to the ongoing collection of data and their results. Further special efforts will be made to build understanding of the UNJP results and differentiated impacts of ecosystem services on women, men and other social groups. Improved monitoring of gender equality in the UNJP will also support improved public participation by women. Finally, budget will be used to support inclusion of women's organisations in particular, women led-organizations in the UNJP.

It is expected that this UNJP on ecosystem services would generate an interest in environmental, social, and governance (ESG) investments by the international financing institutions (IFI) like the ADB and World Bank who, in other parts of the world support such initiative.

The UNJP will seek a partnership with one of the IFI to bring a discussion on ESG tools such as resilience bonds; green banks; parametric insurance; markets for carbon, biodiversity, storm water trading, etc.; conservation ballot initiatives; voluntary opt-in investment programmes; innovative labelling; and so on. This activity cannot be budgeted and added in the UNJP due to the resource constraints but it is hoped that one of the IFIs would show interest.

2.5 Partnerships and stakeholder engagement

The UNJP on Ecosystem Services has already established the purposes of, and principles for, engaging with the partners. For a meaningful stakeholder engagement, the work is organized in three partnership clusters, each led by a government entity as below:

- MNRE [Lead], SBS [Supporting] in all actions to be implemented through UNESCAP.
- MNRE [Lead], SBS [Supporting] in all actions to be supported through UNEP and leveraged on the work of the regional organization, SPREP.
- SROS [Lead], SBS [Supporting] in all actions to be supported through UNESCO.

Outcome-wise the above configuration appears as below:

- Outcome 1: SROS
- Outcome 2: MNRE
- Outcome 3: MNRE

During the UNJP planning meetings, stakeholder mapping was completed and who is doing what identified (refer Section C.14 and Table 2). The planning meetings were also used to by the government entities to determine the issues of level of engagement and identify scope of support required from each of the PUNOs to deliver on the UNJP.

The coordination exercises during implementation will be focussed on:

a) convening the stakeholders included in the Table 2 to understand their needs and prioritization by them;

b) determine where there are the greatest connections and opportunities for synergies beyond those already identifies and for more detailed joint work;
c) what localized strategies for and approaches to gender equality may be appropriate in a given context and who can help deploy the strategy;
d) assess experiences so far and what changes may be needed as implementation progresses:
e) changes in the relationship among the existing partners and/or broadening or partnerships as may be needed.

In a number of activities, specific prioritization is needed by engaging key stakeholders. The PUNOs will support such mapping and suggest ways for developing newer relationship.

The UNJP, through regular coordination will establish a feedback loop in order for implementing partners to have more effective relationships externally in particular for community outreach. The feedback loop will first focus on improving the ways in which the PUNOs, MNRE, SROS, SBS and SPREP communicate internally that would determine external communication.

The PUNOs will have a specific responsibility to evaluate community engagements, gender equality and inclusion. However, this responsibility will be met by evaluating jointly with stakeholders, inviting feedback from community-members, women and girls and other people identified as being in vulnerable contexts.

The core team of PUNOs, MNRE, SROS, SBS and SPREP will also ensure that a risk of inconsistent messages through interactions with CSOs, community organizations, women and youth is avoided jointly agreeing on public education and communication strategies and actions.

The government entities are well-placed to be aware of new projects and programmes related to ecosystem services since they collaborate with UN Organizations as well as others on a variety of pooled funds. The PUNOs are well-placed to know internal resources within the UN Organizations and seek inputs, regional from the regional Issue-based coalition on the technical issues.

In order to engage the Joint SDG fund donors, the PUNOs will have a short and simple communication plan, aligned to the MNRE's communication strategy, to offer visibility as well as engage the donors in key events by coordinating event through the Joint SDG Fund and the UN Resident Coordinator as well as by engaging the contributing country's ambassador if based in Samoa or any of the Pacific countries. Three per cent of the total programme direct cost will be dedicated to the communication to amplify results and give visibility to the Joint SDG Fund contributors.

In addition, the PUNOs will seek out opportunities for cooperation between research institutes and Samoan partners, and increasing awareness of how the UNJP is bringing returns on investments necessary for conservation of biodiversity and increasing the societal impact from ecosystem services.

For a list of related programmes/initiatives, please see Annex 1.

3. Programme implementation

3.1 Governance and implementation arrangements

The UNJP on Ecosystem Services will use the "Delivering as One" (DaO) principle. According to the DaO's One Leader principle, the UN Resident Coordinator (RC) and the UN Country Team together with the government are responsible for the oversight of the Strategic Results Areas of the UN Pacific Strategy.

In Samoa, all UN Joint Programmes are provided oversight by a Joint Steering Committee co-chaired by the Chief Executive Officer (CEO) of the Ministry of Foreign Affairs and Trade and includes the representatives/directors/heads of PUNOs, CEOs of the MNRE, Ministry of Finance (MoF), Samoa Bureau of Statistics (SBS), and Ministry of Women, Community and Social Development (MWCSD) as the members of the Joint Steering Committee. The Joint Steering Committee meets once every three months or may meet as the government may decide in the future.

The RC will nominate a dedicated staff to support the UNJP and coordinate with the UNJP Coordinator and the Joint SDG Fund. The nominated staff will be responsible for maintaining a calendar of the Joint Steering Committee meeting dates and communicating the same, including any changes timely to the PUNOs.

The UNJP Coordinator appointed by the lead PUNO will be a joint post that will report to the three PUNOs.

The lead PUNO is responsible for ensuring technical coordination through quarterly joint coordination meeting of all partners and cooperating organizations, that is, those organizations who may not be implementing activities of this UNJP but this UNJP has co-opted them for leveraging results, improving alignment and harmonization. The technical coordination meeting is co-chaired by lead PUNO's representative and the CEO of the MNRE and CEO of the SROS who shall share this responsibility in an alternate manner. The technical coordination meeting will take place at least 15 days before the Joint Steering Committee.

The CEO of MNRE and the CEO of SROS will present the progress update to the Joint Steering Committee in an alternate order. The alternate co-chairs will be responsible for briefing the Joint Steering Committee on steps being taken by their institutions and other national stakeholders to absorbed and then sustain the results and actions of the UNJP.

The RC, the representatives/directors/heads of PUNOs and the CEOs of MFAT, MNRE and SROS will be responsible to providing oversight to ensure sustainability as well as identifying opportunities to expand, replicate good practices.

The lead PUNO shall receive progress report from other PUNOs at least 15 days before the deadline and shall ensure regular reporting on the UNJP to the Joint SDG Fund via the RCO.

The UNJP is divided into three key outcomes each of which have an identified government lead and a PUNO, while they contribute across result areas either through direct action or by

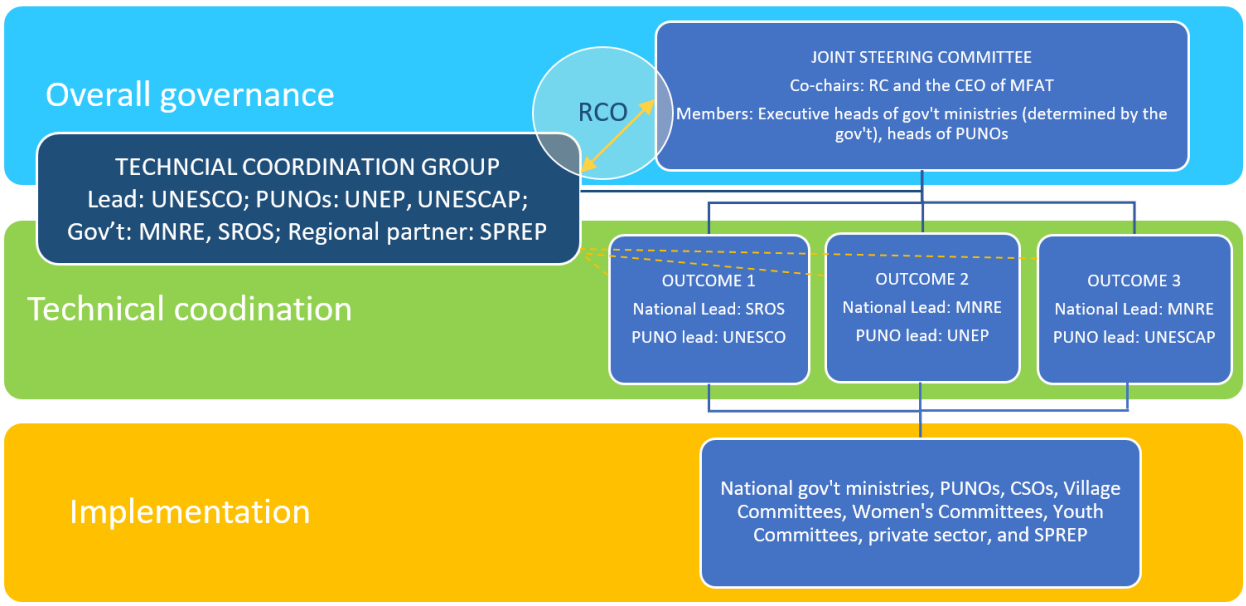
facilitating one-another's work. The outcomes cover the priorities of the environment sector and draw upon specific mandate of the PUNOs.

Each PUNO shall nominate from among their staff, the lead officers for the UNJP who will work with UNJP coordinator appointed by the lead PUNO. In the course of implementation, the UNJP Coordinator shall work closely with the nominated staff of PUNOs to identify and adopt procedures and activities that will lead to greater harmonization of business practices with regard to the implementation of the UNJP. They include optimizing the use of the mutual recognition statement signed by the UNSDG executive heads, joint procurement if needed and use of partner capacity assessments carried out by one another to avoid duplication of efforts.

Whenever practical, aside from the use of UN Volunteer mechanism for the post of project coordinator, the UNJP will make use of local volunteers and volunteerism through the village youth committees to foster greater participation of communities in activities requiring changes in collective behaviour or adoption of new ways of doing things.

All the CSOs and local private sector who have been identified during the formulation of this UNJP will be involved in the implementation and their continued in the UNJP will be assured by the technical coordination meetings, and consultative arrangements through project implementation.

Figure 2: Governance and Implementation Arrangements



3.2 Monitoring, reporting, and evaluation

Reporting on the Joint SDG Fund will be results-oriented, and evidence based. Each PUNO will provide the Convening/Lead Agent with the following narrative reports prepared in accordance with instructions and templates developed by the Joint SDG Fund Secretariat:

- *Annual narrative progress reports*, to be provided no later than. one (1) month (31 January) after the end of the calendar year, and must include the result matrix, updated risk log, and anticipated expenditures and results for the next 12-month funding period;
- *Mid-term progress review report* to be submitted halfway through the implementation of Joint Programme[14]; and
- *Final consolidated narrative report*, after the completion of the joint programme, to be provided no later than two (2) months after the operational closure of the activities of the joint programme.

The Convening/Lead Agent will compile the narrative reports of PUNOs and submit a consolidated report to the Joint SDG Fund Secretariat, through the Resident Coordinator.

The Resident Coordinator will be required to monitor the implementation of the joint programme, with the involvement of Joint SDG Fund Secretariat to which it must submit data and information when requested. As a minimum, joint programmes will prepare, and submit to the Joint SDG Fund Secretariat, 6-month monitoring updates. Additional insights (such as policy papers, value for money analysis, case studies, infographics, and blogs) might need to be provided, per request of the Joint SDG Fund Secretariat. The joint programme will adequately allocate resources for monitoring and evaluation in the budget.

Data for all indicators of the results framework will be shared with the Fund Secretariat on a regular basis, in order to allow the Fund Secretariat to aggregate results at the global level and integrate findings into reporting on progress of the Joint SDG Fund.

PUNOs will be required to include information on complementary funding received from other sources (both UN cost sharing, and external sources of funding) for the activities supported by the Fund, including in kind contributions and/or South-South Cooperation initiatives, in the reporting done throughout the year.

PUNOs at Headquarters level shall provide the Administrative Agent with the following statements and reports prepared in accordance with its accounting and reporting procedures, consolidate the financial reports, as follows:

- Annual financial reports as of 31st December each year with respect to the funds disbursed to it from the Joint SDG Fund Account, to be provided no later than four months after the end of the applicable reporting period; and
- A final financial report, after the completion of the activities financed by the Joint SDG Fund and including the final year of the activities, to be provided no later than 30th April of the year following the operational closing of the project activities.

In addition, regular updates on financial delivery might need to be provided, per request of the Fund Secretariat.

After competition of a joint programmes, a final, *independent and gender-responsive*[15] *evaluation* will be organized by the Resident Coordinator. The cost needs to be budgeted, and in case there are no remaining funds at the end of the joint programme, it will be the responsibility of PUNOs to pay for the final, independent evaluation from their own resources.

[14] This will be the basis for release of funding for the second year of implementation.
[15] How to manage a gender responsive evaluation, Evaluation handbook, UN Women, 2015

The programme will be subject to a joint final independent evaluation with an established arrangement for managing the joint evaluation. The final evaluation will be managed jointly by the PUNOs as per established process for independent evaluations, including use of a joint evaluation steering group and dedicated evaluation managers not involved in the implementation of the joint programme. The evaluations will follow the United Nations Evaluation Group's (UNEG) Norms and Standards for Evaluation in the UN System, using the guidance on Joint Evaluation and relevant UNDG guidance on evaluations. The management and implementation of the joint evaluation will have due regard to the evaluation policies of the PUNOs to ensure the requirements of those policies are met; and with use of appropriate guidance from PUNOs on joint evaluation. The evaluation process will be participative and will involve all relevant programme's stakeholders and partners. Evaluation results will be disseminated amongst governments, donors, academic institutions and stakeholders of civil society (including workers' and employers' organizations) and a joint management response will be produced upon completion of the evaluation process to be made publicly available on the evaluation platforms or similar of the PUNOs and through the UNEG database.

3.3 Accountability, financial management, and public disclosure

The Joint Programme will be using a pass-through fund management modality where UNDP Multi-Partner Trust Fund Office will act as the Administrative Agent (AA) under which the funds will be channelled for the Joint Programme through the AA. Each Participating UN Organization receiving funds through the pass-through has signed a standard Memorandum of Understanding with the AA.

Each Participating UN Organization (PUNO) shall assume full programmatic and financial accountability for the funds disbursed to it by the Administrative Agent of the Joint SDG Fund (Multi-Partner Trust Fund Office). Such funds will be administered by each UN Agency, Fund, and Programme in accordance with its own regulations, rules, directives and procedures. Each PUNO shall establish a separate ledger account for the receipt and administration of the funds disbursed to it by the Administrative Agent.

Indirect costs of the Participating Organizations recovered through programme support costs will be 7%. All other costs incurred by each PUNO in carrying out the activities for which it is responsible under the Fund will be recovered as direct costs.

Funding by the Joint SDG Fund will be provided on annual basis, upon successful performance of the joint programme.

Procedures on financial transfers, extensions, financial and operational closure, and related administrative issues are stipulated in the Operational Guidance of the Joint SDG Fund.

PUNOs and partners must comply with Joint SDG Fund brand guidelines, which includes information on donor visibility requirements.

Each PUNO will take appropriate measures to publicize the Joint SDG Fund and give due credit to the other PUNOs. All related publicity material, official notices, reports and publications, provided to the press or Fund beneficiaries, will acknowledge the role of the host Government, donors, PUNOs, the Administrative Agent, and any other relevant entities. In particular, the Administrative Agent will include and ensure due recognition of the role of each Participating Organization and partners in all external communications related to the Joint SDG Fund.

3.4 Legal context

Agency name: UNEP
Agreement title: Host Country Agreement
Agreement date: 02 Sept 2014

Agency name: UNESCAP
Agreement title: None. Shall operate through UNESCO.
Agreement date: Not applicable.

Agency name: UNESCO
Agreement title: Host Country Agreement
Agreement date: 16 Nov 1983

D. ANNEXES

Annex 1. List of related initiatives

Name of initiative/project	Key expected results	Links to the joint programme	Lead organization	Other partners	Budget and funding source	Contract person (name and email)
Water quality monitoring of priority water sites - Upolu	Establishment of baseline water quality data for Upolu to assist management of natural waterways	Collection of data to inform management of natural water ecosystems. *The UNJP on Ecosystem Services will enable this work to be undertaken in the rivers on other islands.*	SROS	MNRE – Water Resources Division	Joint funding by SROS and MNRE from the national and other sources' budgets (e.g., GCF in 2020)	Annie Tuisuga annie.tuisuga@srosmanagement.org.ws
Bioprospecting Research under the Bio-discovery Centre	To research anti-diabetic, anti-cancer and antimicrobial potential of Samoan plants	As a result of this project, SROS started its own Medicinal Garden, to promote conservation of Samoa's medicinal plant species that may be becoming rare or extinct (Aichi 2020 targets 12 and 13) *The UNJP on Ecosystem Services will leverage work initiated by the government.*	SROS	Maurice Wilkins Centre, New Zealand	National budget allocation for SROS	
Circular Economy for the Recovery of (CERO) Waste Programme	To divert waste from various waste streams from going to landfill, by processing into useful products	Promotion of a circular economy through waste reduction. *Data collected through the State of Environment exercise and contained in the portals on which UNEP, MNRE and SPREP will work and databases can be used in CERO initiative.*	SROS	UNDP	UNDP	
Inform Project	Building national capacity to	Systems and activities established by inform that this project can	SPREP	MNRE, UNEP	GEF - $4.3 million regional	Paul Anderson,

	collect, analyse and use environmental data	strengthen and build on. *Some technical co-implementation with this project will be organized to ensure alignment and synergy.*			project in 14 countries from 2017-2022	Inform Manager, SPREP, paula@sprep.org
Marine Spatial Planning	Implementation of National Oceans Policy and strengthened marine spatial planning	Data and information sharing to enable oceans policy formulation, implementation and MSP. *Collaboration with project is foreseen for the Outcome 3 area.*	MNRE	IUCN, SUNGO	EU - US$1 Million from 2019-2022	Afele Faiilagi, ACEO, afele.faailagi@mnre.govt.ws
ACP-MEAs Programme Phase 3	Strengthened capacity in MEA planning, implementation and reporting	Products from project will assist planning, implementation and reporting on MEAs. *This project will inform the implementation of some of the activities of the UNJP on Ecosystem services.*	SPREP	MNRE, UNEP	ACP – US$3.4 million regional project in 14 countries from 2020-2024	Anastacia Stowers, Project Manager, anstacias@sprep.org
Samoa Knowledge Society Initiative	Outcome 2: Increased access to information and knowledge for the general public through online and offline knowledge sharing services	Community of Practice established and multi partner research collection on water, environment and health, using open research methodology completed	NUS/MNRE (for this component)	UNESCO, UNDP, MESC, MCIT, NUS, PSC, Ombudsman's Office, MFAT	India-UN Development Partnership Fund via UNOSSC - US$1 million	Jaco Du Toit, j.dutoit@unesco.org

Annex 2. Overall Results Framework

2.1. Targets for Joint SDG Fund Results Framework

Joint SDG Fund Outcome 1: Integrated multi-sectoral policies to accelerate SDG achievement implemented with greater scope and scale

Indicators	Targets	
	2022	2023
1.1: integrated multi-sectoral policies have accelerated SDG progress in terms of scope[16]:	One (01): Samoa's Environment Outlook and a Targeted Response Framework.	
1.2: integrated multi-sectoral policies have accelerated SDG progress in terms of scale[17]:		National Environment Sector Plan (NESP) 2022-2026.

Joint SDG Fund Output 3: Integrated policy solutions for accelerating SDG progress implemented

Indicators	Targets	
	2022	2023
3.1: # of innovative solutions that were tested[18] (disaggregated by % successful-unsuccessful):	One (01): Efficacy of the Biodiversity Centre at SROS in genetic-safeguarding and preventing loss of at-risk plant species using a bio-pharma model.	
3.2: # of integrated policy solutions that have been implemented with the national partners in lead	One (01): Efficacy of the Biodiversity Centre at SROS in genetic-safeguarding and preventing loss of at-risk plant species using a bio-pharma model.	One (01): Testing of the policy toolkit

[16]Scope=substantive expansion: additional thematic areas/components added or mechanisms/systems replicated.
[17]Scale=geographical expansion: local solutions adopted at the regional and national level or a national solution adopted in one or more countries.
[18]Each Joint programme in the Implementation phase will test at least 2 approaches.

3.3: # and share of countries where national capacities to implement integrated, cross-sectoral SDG accelerators has been strengthened:		One (01): Improved capacity in MNRE, SBS and SROS to collect and analyze SDG 14 related data and policy-measures to accelerate progress against SDG 14 targets

Joint SDG Fund Operational Performance Indicators

*(**do not change or add** – this is for information only so that teams know what they will be assessed against)*

- Level of coherence of UN in implementing programme country[19]
- Reduced transaction costs for the participating UN agencies in interaction with national/regional and local authorities and/or public entities compared to other joint programmes in the country in question

- Annual % of financial delivery
- Joint programme operationally closed within original end date
- Joint programme financially closed 18 months after their operational closure

- Joint programme facilitated engagement with diverse stakeholders (e.g. parliamentarians, civil society, IFIs, bilateral/multilateral actor, private sector).
- Joint programme included addressing inequalities and the principle of "Leaving No One Behind".
- Joint programme featured gender results at the outcome level.
- Joint programme undertook or draw upon relevant human rights analysis, and have developed or implemented a strategy to address human rights issues.
- Joint programme planned for and can demonstrate positive results/effects for youth.
- Joint programme considered the needs of persons with disabilities.
- Joint programme made use of risk analysis in programme planning.
- Joint programme conducted do-no-harm / due diligence and were designed to take into consideration opportunities in the areas of the environment and climate change.

[19] Annual survey will provide qualitative information towards this indicator.

2.2. Joint programme Results framework

Result / Indicators	Baseline	2022 Target	2023 Target	Means of Verification	Responsible partner
Outcome 1: Strengthened policies and plan for provisioning, regulating, cultural and supporting ecosystem services by 2024 for the recovery of sustainable tourism, agriculture and fisheries from the impacts of COVID-19 pandemic and other relevant phenomena, such as extreme weather events.					
Outcome 1 indicator: Improved policy-practice alignment for supporting ecosystem services.	Six (06) policies and plans have objectives / goals / results concerning ecosystem services, Aug 2021[20]	Stakeholders, including women and other marginalized engage in policy toolkit scoping for to govern safety, efficacy, regulation and bioethics of research in and use of medicinal plants	At least one example of an initiative demonstrating use of an accelerator approach for the implementation of SDG 14	Draft policy toolkit development related participation data disaggregated by gender, age, disability and location. An experience-map of using accelerator approach for the implementation of SDG 14 in the UNJP progress / final report	SROS and UNESCO UNESCAP
Output 1.1: Samoa's Environment Outlook and a Targeted Response Framework in the form of the National Environment Sector Plan (NESP) 2022-2026 produced to inform support mechanisms such as policies, coordination, and mainstreaming of ecosystem-based approaches in the national development planning.					
Output 1.1 indicator: Rationalized quality data available for developing an	Zero (0) integrated repository of	Review and updating of NEIRS.	Published National Environment	Online and offline availability of the NESP.	MNRE and UNEP

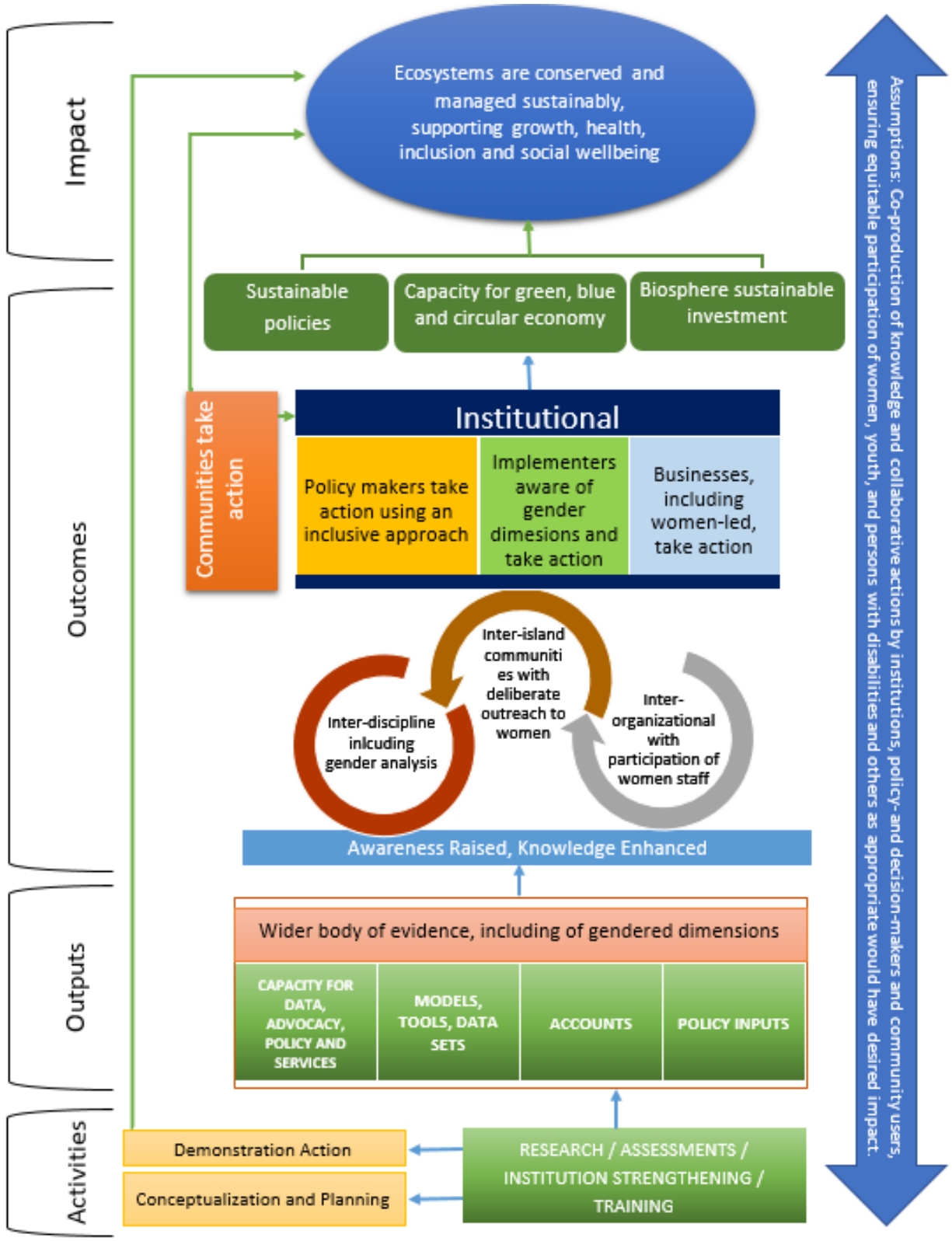
[20] The policies and plans are;
- Climate Change Policy 2020,
- Samoa Ocean Strategy 2020-2030,
- National Environment Sector Plan 2017-2021,
- O Le Pupū Pu'e National Park (Ramsar Site) Management Plan 2020-2030,
- Mauga o Salafai National Park Management Plan 2018-2023
- Masamasa-Falelima National Park Management Plan

Result / Indicators	Baseline	2022 Target	2023 Target	Means of Verification	Responsible partner
environment outlook and targeted response framework.	rationalized data, Aug 2021.		Sector Plan (NESP) 2022-2026.		
Output: 1.2: National systems and measures to enhance ecosystem services have improved preparedness to collect and analyze SDG 14 related data and policy-measures to accelerate progress against SDG 14 targets in a gender responsive manner.					
Output 1.2 (a) indicator: No. of workshops.	Zero (0) training SDG 14 Accelerator Methodology, Aug 2021	One (01) training with minimum 50 per cent women trainees.	One (01) training with minimum 50 per cent women trainees.	Training report Participation data disaggregated by gender, age, disability and location.	UNESCAP, MNRE, SBS
Output 1.2 (b) indicator: Equal number of marine and coastal ecosystems and livelihoods on which coastal women are dependent in proportion to the total number of marine and coastal ecosystems and livelihoods assessed.	Zero (0) assessments assessing impacts on marine ecosystems important to coastal women and impact on their livelihoods, Aug 2021.	Gender questionnaire / assessment framework.	Report generation and sharing.	Report of the Assessment Participation data disaggregated by gender, age, disability and location.	UNESCAP, MNRE, SBS
Output 1.3: Data on safeguarding priority genetic resources made available to build a momentum for achieving Aichi Biodiversity Targets 12 and 13 on preventing genetic extinction of known threatened species and the genetic diversity of cultivated plants and improving evidence for informing implementation actions under SDG 14 and SDG 15.					
Output 1.3 indicator: No. of women researchers involved and their role in research.	Zero (0) research with specific focus on Aichi Biodiversity Targets 12 and 13, Aug 2021.	Research planning and gender and diversity related orientation to researchers for gender responsive research.	Publication of report.	Training report Participation data disaggregated by gender, age, disability and location.	SROS UNESCO SBS
Output 1.4: Policy preparedness to govern safety, efficacy, regulation and bioethics of research in and use of medicinal plants reached.					

Result / Indicators	Baseline	2022 Target	2023 Target	Means of Verification	Responsible partner
Output 1.4 indicator: Availability of recommendations to govern safety, efficacy, regulation and bioethics of research in and use of medicinal plants.	Zero (0), Aug 2021.	Research report on ethical issues, consultations including with women healers practicing *Fofo* or *taulasea* and treating *ma'i Samoa* or illnesses that are considered to require traditional healers.	Report of the toolkit testing that among other issues offers resources concerning women.	Toolkit Participation data disaggregated by gender, age, disability and location.	SROS UNESCO
Outcome 2: Environmental data and information analyzed, evidenced based approaches developed and adopted by 2023 for the benefit of green, blue and circular economy.					
Outcome 2 indicator: Data, statistics and analysis are being sought for policy and planning.	Partially, demand exist but challenges in availability prevent usage, Aug 2021.	Research planning, ICT systems preparations, and processes are customized for inclusive participation of women and marginalized groups and knowledge building.	A system for tracking request for, use of and ease of access, including by persons with disabilities, to data is developed.	Online data system with evidence of demand.	MNRE, SPREP, SBS and UNEP
Output 2.1: The national stakeholders have improved capacity to manage range and quality of data available by harnessing Open Access information and communication technologies (ICTs), produce reports for meeting national and international obligations and mainstreaming ecosystem-based approaches in the national planning and policies process and documents.					
Output 2.1 indicator: Data portal and interactive SOE Report	Zero (0), Aug 2021.	Samoa Environmental Data Portal preparations take into account issues of accessibility and east of access by users.	SOE interactive format is easy to grasp for grasp for low-literate and persons with disabilities.	Samoa Environmental Data Portal	MNRE, SPREP and UNEP

Result / Indicators	Baseline	2022 Target	2023 Target	Means of Verification	Responsible partner
Output 2.2: National stakeholders have comparable and consistent data for mainstreaming biodiversity into national and sector-level plans, policies and processes and for supporting reporting on the 2020 Aichi Biodiversity Targets, which remains due, and Post 2020 Targets.					
Output 2.2 indicator: Gender, age, disability and location disaggregated data together with an inventory of capacity needs for women and girls improved participation	Zero (0), Aug 2021.	Gender gaps in existing data sets identified and bridged for a set of ocean accounts for targeted ecosystems	Public release of ocean accounts information and water ecosystems research report	Access and availability of the two resources	MNRE, UNESCAP SROS and UNESCO
Outcome 3: Capacity for valuation of natural capital and ecosystem services using quality and consistent data with the System of Environmental-Economic Accounting (SEEA) Ecosystem Accounting methods enhanced by 2024.					
Outcome 3 indicator: Policy and planning recognition of differentiated roles women and men play in protecting and restoring ecosystems differentiated benefits from the economic benefits from sustainable use of marine resources	Zero (0), Aug 2021.	Accounts planning is customized to take into account SDG 14.2 and SDG 14.7 from a gender perspective	A select number of ocean accounts are tested and women and men benefit equally from capacity development	Functional ocean accounts	MNRE, SPREP and UNEP
Output 3.1: Pilot extent and condition accounts developed to support efforts for evaluating ecosystem services and trends over time to highlight impacts of pursuing SDG 14 and SDG 15.					
Output 3.1 indicator: No. of ecosystems with impact on gender equality, good health and inclusion selected for ocean accounts.	Zero (0), Aug 2021.	Set up of accounts	Equal number of women and men trained in extent and condition accounts development.	Participation data disaggregated by gender, age, disability and location Training material used	UNESCAP and MNRE

Annex 3. Theory of Change graphic



Annex 4. Gender marker matrix

Complete the table below, using the instruction for gender marker scoring. The total score is the average of individual scores.

Indicator		Score	Findings and Explanation	Evidence or Means of Verification
N°	*Formulation*			
1.1	Context analysis integrate gender analysis	**2** **Meets minimum requirement**	The context analysis includes a gender analysis of issues faced by women and girls in village decision making where it concerns biodiversity. Women and girls have been identified as target audiences for the programme. Highlighted target progress from NBSAP outlining those that are 'likely', 'unlikely', 'mixed' to be achieved.	Prodoc context analysis and problem statement Section A1.4
1.2	Gender Equality mainstreamed in proposed outputs	**2** **Meets minimum requirement**	Gender Equality and empowerment of women mainstreamed across all output areas. The three outcome areas in the joint programme with capacity building, gender equality and inclusion as cross cutting priorities running through the following actions: 4. Strengthened policies and plan for provisioning, regulating, cultural and supporting ecosystem services by 2024 for the recovery of sustainable tourism, agriculture and fisheries from the impacts of COVID-19 pandemic and other relevant phenomena, such as extreme weather events. 5. Environmental data and information analysed, evidenced based approaches developed and adopted by 2023 for the benefit of green, blue and circular economy. 6. Capacity for valuation of natural capital and ecosystem services using quality and consistent data using System of Environmental-Economic Accounting (SEEA) Ecosystem Accounting methods enhanced by 2024.	Outcomes and Expected Results

1.3	Programme output indicators measure changes on gender equality	**3** **Exceed minimum requirements**	80% of the indicators (9 out of the 11 indicators) are gender sensitive and can track progress towards GEWE.	Prodoc Results Framework and monitoring
2.1	PUNO collaborate and engage with Government on gender equality and the empowerment of women	**2** **Meets two requirements**	During the design, the programme consulted with four key government ministries in which three are led by women chief executive officers (MFAT/ MNRE/ SBS). The majority of the government consulted included more women than men. In the decision making level, the Ministry of Women, Community and Social Development as well as UN Women are members of the Joint Programme Steering Committee to ensure gender equality and empowerment of women.	Prodoc Governance and list of stakeholders consulted
2.2	PUNO collaborate and engages with women's/gender equality CSOs	**2** **Meets two requirements**	The women/ GE CSOs will be incorporated into the consultations/trainings and activities related to the joint programme implemented as outlined in Section A1.4 and Section C1.2. The joint programme strengthens existing activities/ work by the partners (Government/CROP/ UN/ CSOs). These CSOs include OLSSI/ Women in Business Development (WIBDI) and Samoa Conservation Society.	Prodoc
3.1	Program proposes a gender-responsive budget	**1** **Approaches minimum requirements**	The programme will ensure work planning and expenditure processes will include gender responsive actions and allocations. Expectation is that expenditure will be 50:50 on women and men. Budget will be used to support inclusion of women's organisations / women lead organisation in the joint programme.	Prodoc Financing Section
Total scoring		**2**		

Annex 5. Budget and Work Plan

5.1 Budget per UNSDG categories

UNSDG BUDGET CATEGORIES	UNEP		UNESCAP		UNESCO		TOTAL		Grand total
	Joint SDG Fund (USD)	PUNO Contribution (USD)	Joint SDG Fund (USD)	PUNO Contribution (USD)	Joint SDG Fund (USD)	PUNO Contribution (USD)	**Joint SDG Fund (USD)**	**PUNO Contribution (USD)**	
1. Staff and other personnel	0		0		126,953		126,953		
2. Supplies, Commodities, Materials	0		0		0		0		
3. Equipment, Vehicles, and Furniture (including Depreciation)	0		0		0		0		
4. Contractual services	0		40,000		40,000		80,000		
5.Travel	4,503	0	5,000	27,087	6,793	39,700	16,293	66,787	
6. Transfers and Grants to Counterparts	218,000		47,000		160,000		425,000		
7. General Operating and other Direct Costs	5,816		1,460		8,400		15,679		
Total Direct Costs	**228,320**		**93,460**		**342,146**		**663,925**		
8. Indirect Support Costs (Max. 7%)	*15,952*		*6,542*		*23,950*		*46,475*		
TOTAL Costs	244,302	-	100,002	27,087	366,096	39,700	**710,401**	66,787	777,188
1st year	**168,500**		**64,344**		**191,272**		**424,104**	0	
2nd year	**75,802**		**35,658**		**174,824**		**286,296**	0	

5.2 Budget per SDG targets

SDG TARGETS		%	USD
14.2	By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans.	23	178,753
15.1	By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.	17	132,122
15.4	By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development.	5	38,859
15.5	Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species.	20	155,438
15.8	By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species.	10	77,719
15.9	By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts.	20	155,438
15.a	Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems.	5	38,859
TOTAL		**100**	**777,188**

5.3 Work plan

Introduction: The work plan and year-wise allocation of the budget is based on the concerned national stakeholders requirements and timeframes of implementation. While biodiversity along with social development is a key priority of the new government in Samoa and there is need to deliver this project timely, January to March is a period when the government begins the annual budget planning, which leaves the policymakers with limited time for other actions. The month of January is also the new financial year for all PUNO and new accounts open around mid of January. Therefore, this project will treat the first quarter as the inception phase to set up the project in the each of the PUNOs, hire the UNJP Coordinator, begin the preparation of support documents and internal approvals that are needed for establishing key partnership agreements, hold the first joint steering committee meeting, set-up UNJP coordination group, etc. Alongside, preparation for some of the activities would be undertaken as indicated in the work plan. The work plan will be periodically updated by the PUNOs and the national stakeholders during the course of the implementation.

Total Cost to the Joint SDG Fund: US$ 710,401

Cost justification: By Outcome, we envision the following cost to the Joint SDG Fund:

Outcome 1 : US$ 277,000
Outcome 2 : US$ 208,000
Outcome 3 : US$ 25,000
Total Outcome cost : US$ 510,000
Project Management : US$ 153,926
Total Direct Cost : US$ 663,926
Programme Support Cost : US$ 46,475

Cost justification:

The cost justification is under the Overall Budget Description column in the work plan below:

Outcome 1			**Strengthened policies and plan for provisioning, regulating, cultural and supporting ecosystem services by 2024 for the recovery of sustainable tourism, agriculture and fisheries from the impacts of COVID-19 pandemic and other relevant phenomena, such as extreme weather events.**													
Output	**Annual target/s**		**List of activities**	**Time frame**								**PLANNED BUDGET (US$)**				**PUNO/s involved**	**Implementing partner/s involved**
	2022	**2023**		**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Overall budget description**	**Joint SDG Fund (USD)**	**PUNO Contributions (USD)**	**Total Cost (USD)**		
Output 1.1: Samoa's Environment Outlook and a Targeted Response	40,000	40,000	Activity 1.1.1: Integrate environmental data and the State of			X	X	X	X	X		Technical expertise for the reviewing national planning	80,000	0	**80,000**	UNEP	MNRE, SPREP, SBS, Selected CSOs

Framework in the form of the National Environment Sector Plan (NESP) 2022-2026 produced to inform support mechanisms such as policies, coordination, and mainstreaming of ecosystem-based approaches in the national development planning.			Environment (SOE) Reports findings into the national planning documents									documents, integrating. Workshop and seminars. Workshop, seminar and communication material. Includes 5% for M&E and 3% for communication by the partner.					
Output: 1.2: National systems and measures to enhance ecosystem services have improved preparedness to collect and analyze SDG 14 related data and policy-measures to accelerate progress against SDG 14 targets in a gender responsive manner.	39,500	17,500	Activity 1.2.1: Hold two workshops based on ESCAP's SDG 14 Accelerator Methodology over the course of the two years to catalyze the delivery of SDG 14 targets	X	X	X	X	X				Consultancy(ies) Resources for the workshops, Potential travel or hybrid form of participation by the MNRE in the Ocean Day. Implementation partner agreement with MNRE. Includes 5% for M&E and 3% for communication by the partner.	10,000	3,000	**13,000**	UNESCAP	MNRE, SBS, Selected CSOs
			Activity: 1.2.2 (a): Conduct fieldwork in coastal communities to assess the impacts of climate change on marine/coastal ecosystems and livelihoods	X	X	X	X	X					10,000	3,000	**13,000**	UNESCAP	MNRE, SBS, Selected CSOs
			Activity: 1.2.2 (b): Collect coastal and marine ecosystem data for monitoring and restoration efforts, support capacity building, in particular, for actions under the current the current MNRE-DEC Management Plan 2021-2022, and efforts towards validation of information for	X	X	X	X	X	X	X	X		32,000	0	**32,000**	UNESCAP	MNRE, SBS, SPREP, Selected CSOs

			the State of Environment Reports[21]														
			Activity 1.2.3: Support MNRE and/or other national stakeholders as advised by the Government, in activities aligned within the Regional Decade Programme for the implementation of the UN Decade of Ocean Science for Sustainable Development 2021-2030 (Ocean Decade) in Asia-Pacific		X			X				5,000	1,087	**6,087**	UNESCAP	MNRE
Output 1.3: Data on safeguarding priority genetic resources made available to build a momentum for retroactively pursuing Aichi Biodiversity Targets 12 and 13 on preventing genetic extinction of known threatened species and the genetic diversity of cultivated plants and improving evidence for informing implementation actions under SDG 14 and SDG 15.	60,000	40,000	Activity: 1.3.1: Research on bio-medicinal values of available Samoan genetic material (both terrestrial and marine) to promote biodiversity conservation		X	X	X	X	X	X		Screening for bioactivities (bio-assays, chemicals, small lab equipment, etc.) Conservation of ecological sites in collaboration with MNRE, including the expansion and further strengthening of existing bio-medicinal garden. Procurement to be carried out as per the government processes. Includes 5% for M&E and 3% for communication by the partner.	100,000	0	**100,000**	UNESCO	SROS (Contract/Grant Partner), MNRE, Selected community / women's organizations
Output 1.4: Policy preparedness to govern safety, efficacy, regulation	15,000	25,000	Activity: 1.4.1: Development of a policy toolkit	X	X	X	X	X	X	X	X	Technical expertise for the designing, developing,	40,000	0	**40,000**	UNESCO	SROS (Technical assistance),Selected

[21] Implementation partner agreement with MNRE

and bioethics of research in and use of medicinal plants reached.			comprising of a research report on ethical issues in micro-relationships between science and technology and professional use of herbal medicine and traditional knowledge, and recommended policy and/or legislative actions required to bridge the gap between ethics, research and practice for herbal medicine, which is supportive of genetic conservation and biodiversity, while ensuring compliance with international standards concerning medicinal research and bio-ethics								testing and piloting of the policy toolkit Workshop for capacity building. Includes 5% for M&E and 3% for communication by the partner.					community / women's organizations
Outcome 1 subtotal	**154,,500**	**122,500**										**277,000**	**7,087**	**284,087**		
Outcome 2			**Outcome 2: Environmental data and information analyzed, evidenced based approaches developed and adopted by 2023 for the benefit of green, blue and circular economy.**													
Output	**Annual target/s**		**List of activities**	**Time frame**								**PLANNED BUDGET (US$)**				**PUNO/s involved**	**Implementing partner/s involved**
	2022	**2023**		**Q1**	**#**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Overall budget description**	**Joint SDG Fund (USD)**	**PUNO Contributions (USD)**	**Total Cost (USD)**		
Output 2.1: The national stakeholders have improved capacity to manage range and quality of data available by harnessing Open Access information and communication	25,000	25,000	Activity 2.1.1: Hold four capacity building workshops and need-based targeted training for management and use of the	X	X	X	X	X	X	X	X	Resources for workshops Technical expertise Includes 5% for M&E and 3% for communication by the partner.	50,000	0	**50,000**	UNEP	MNRE, SPREP, SBS, Selected CSOs

technologies (ICTs), produce reports for meeting national and international obligations and mainstreaming ecosystem-based approaches in the national planning and policies process and documents.			Samoa Environmental Data Portal													
	88,000	-	Activity 2.1.2: Strengthen Samoan government and non-government stakeholders' capacity to generate regular SOE Reports	X	X	X	X	X	X	X	X	Consultancies for assessment of planning and carrying out thematic assessment and writing reports covering Atmosphere, Built environment, Heritage, Biodiversity, Land, Inland water, Coasts, Marine environment, Antarctic environment and its significance to climate change and so on. Consultations and workshops. Writing, editing, designing and publishing in online interactive format. Procurement processes to be carried out as per the government rules. Includes 5% for M&E and 3% for communication by the partner.	88,000	0	**88,000**	UNEP	MNRE , SPREP, SBS, Selected CSOs
Output 2.2: National stakeholders have comparable and consistent data for mainstreaming biodiversity into national and sector-level plans, policies and processes and for supporting reporting on the 2020 Aichi Biodiversity Targets, which	10,000	-	Activity 2.2.1: Compilation and analysis of data related to a set of ocean accounts for targeted ecosystems	X	X	X	X					Consultancy(ies) Includes 5% for M&E and 3% for communication by the partner.	10,000	6,000	**16,000**	UNESCAP	MNRE, SBS, Selected CSOs
	35,000	25,000	Activity 2.2.2: Water quality monitoring of priority river ecosystems that run off into marine		X	X	X	X	X	X		Technical expertise for implementation of a water quality monitoring program for	60,000	0	**60,000**	UNESCO	SROS (Contract/Grant Partner), MNRE, SBS Selected community /

remains due, and Post 2020 Targets.			ecosystems and community lagoons used for fishing and community recreational activities									identified priority water resources Monthly water testing costs for all sites, sampling consumables and equipment, etc. Includes 5% for M&E and 3% for communication by the partner.					women's organizations
Outcome 2 subtotal	**158,000**	**50,000**											**208,000**	**6,000**	**214,000**		
Outcome 3	**Outcome 3: Capacity for valuation of natural capital and ecosystem services using quality and consistent data with the System of Environmental-Economic Accounting (SEEA) Ecosystem Accounting methods enhanced by 2024.**																
Output	**Annual target/s**		**List of activities**	**Time frame**								**PLANNED BUDGET (US$)**				**PUNO/s involved**	**Implementing partner/s involved**
	2022	**2023**		**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Overall budget description**	**Joint SDG Fund (USD)**	**PUNO Contributions (USD)**	**Total Cost (USD)**		
Output 3.1: Pilot extent and condition accounts developed to support efforts for evaluating ecosystem services and trends over time to highlight impacts of pursuing SDG 14 and SDG 15.	5,000	5,000	Activity 3.1.1: Set up the accounts and hold a national workshop to share and integrate feedback on the pilot an extent account and condition account				X	X	X	X		Consultancy(ies) Training material Includes 5% for M&E and 3% for communication by the partner.	10,000	6,000	**16,000**	UNESCAP	MNRE, SBS, Selected CSOs
	5,000	10,000	Activity 3.1.2: Provide technical support and capacity-building training for the pilot extent and condition accounts development				X	X	X	X	X		15,000	8,000	**23,000**	UNESCAP	MNRE, SBS, Selected CSOs
Outcome 3 subtotal	**10,000**	**15,000**											**25,000**	**14,000**	**39,000**		
Activity Total	**322,500**	**187,500**											**510,000**	**27,087**	**537,087**		

Joint programme management costs			**List of activities**	**Time frame**								**PLANNED BUDGET (US$)**				**PUNO/s involved**
Cost Items	**2022**	**2023**		**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Overall budget description**	**Joint SDG Fund (USD)**	**PUNO Contributions (USD)**	**Total Cost (USD)**	

Joint Programme Coordinator	60,454	66,499	N/A	X	X	X	X	X	X	X	X	Recruited by UNESCO as a joint post reporting to all three PUNOs, supporting coordination between the PUNOs and the implementing partners, technical coordination among implementing partners, monitoring of all PUNOs programme activities, supporting communication and visibility, reporting and providing technical backstopping as required. The Job Description to be approved by all PUNOs.	126,953	0	**126,953**	UNESCO
Programme Specialist (RP) and Programme Assistant	-	-		X	X	X	X	X	X	X	X	Technical backstopping for the UNJP by UNESCO and general services support for the UNJP	0	25,000	**25,000**	UNESCO
Joint Programme Coordinator / UNESCO Travel	3,060	3,733		X	X	X	X	X	X	X	X	Coordination and monitoring related travel by the Joint Programme Coordinator	6,793	0	**6,793**	UNESCO
UNEP Travel	2,002	2,505		X	X	X	X	X	X	X	X	Monitoring related travel by UNEP Staff	4,503	0	**4,503**	UNEP
Equipment for the Joint Programme Coordinator	1,800	-		X	X	X	X	X	X	X	X	Laptop and peripherals	1,800	0	**1,800**	UNESCO
Security cost	2,349	2,151		X	X	X	X	X	X	X	X	Essential cost to cover UNDSS advised requirements	4,500	0	**4,500**	UNESCO
Rent/Leases	-	-		X	X	X	X	X	X	X	X		0	4,200	**4,200**	UNESCO
Maintenance and Repairs	-	-		X	X	X	X	X	X	X	X		0	2,500	**2,500**	UNESCO
Telecommunications	1,096	1,004		X	X	X	X	X	X	X	X	Phone, Mobile top up and data for official / Joint	2,100	0	**2,100**	UNESCO

												Programme work purposes					
Utilities	-	-		X	X	X	X	X	X	X	X		0	1,400	**1,400**	UNESCO	
Supplies	-	-		X	X	X	X	X	X	X	X		0	6,300	**6,300**	UNESCO	
Finance cost	-	-		X	X	X	X	X	X	X	X		0	300	**300**	UNESCO	
General operating expenses	2,475	3,341		X	X	X	X	X	X	X	X	Office running cost recovery for UNEP	5,816	0	**5,816**	UNEP	
General operating expenses	635	825		X	X	X	X	X	X	X	X	Office running cost recovery for UNESCAP	1,460	0	**1,460**	UNESCAP	
Programme management total	**73,870**	**80,056**											**153,926**	**39,700**	**193,626**		
Programme Support Cost	**27,746**	**18,729**											**46,475**				
PROGRAMME TOTAL	**424,116**	**286,285**											**710,401**	**66,787**	**777,188**		

Overall cost-effectiveness analysis:

The ecological, social and health impacts of the UNJP compared to the status quo marked by ecological degradation are assumedly positive. The budget is prepared taking into account the current and foreseeable reality of Samoa's border closure due to the global COVID-19 pandemic by focusing on national consultancies where needed using in-house technical capacities of PUNOs to support the national consultants and implementing partners remotely. The inclusion of SPREP too is encouraged by this factor that they have prior experience of similar work and they are present in Samoa, thereby, minimizing the reliance on high-cost remote consultancies. These arrangements make the project implementation cost-effective.

Annex 6. Risk Management Plan

IDENTIFIED RISKS AND TYPE	RISK LEVEL Likelihood X Impact	LIKELIHOOD Certain - 5 Likely - 4 Possible - 3 Unlikely - 2 Rare – 1	IMPACT Essential – 5 Major - 4 Moderate - 3 Minor - 2 Insignificant - 1	MITIGATION MEASURES	RESPONSIBLE PERSON. ORGANIZATION
Contextual The policy, legislative and planning environment essential for UNJP actions to be sustainable in the long term are not pursued and business / immediate gains take over biodiversity considerations.	Medium	2	5	The UNJP will work closely with the national stakeholders, government or establish the need for restoration of ecosystem services and use a participatory approach to dialogue across a wide range of stakeholders including coastal communities and women and others. Context-specific trends will be monitored and discussed in the quarterly technical coordination meetings to find commonly agreed solutions.	CEO, MNRE CEO, SROS Joint Programme Coordinator, PUNOs
Contextual The Joint programme coordinator is hired but due to the prevailing COVID-19 pandemic related state of emergency in Samoa (since Jan 2020), the consequent closure of the international border of Samoa, entry into Samoa is not possible.	High	4	5	The PUNOs and the CEOs of the lead national partner institutions to emulate the blended learning format for work purposes. This would require the Joint Programme Coordinator to do some work online in a format where the national stakeholders have control over the path and pace at which they engage with content; some actions will be taken in-person by the national stakeholders; and all meetings and workshops will be organized in places where online and in-person participation is possible and is complementary to create an integrated work environment until the time, the Joint Programme Coordinator receives permission to enter Samoa from the immigration and health authorities.	Heads of PUNOs, CEO, MNRE CEO, SROS
Programmatic Supporting services and national arrangements for long term maintenance of ecosystem services related data and	Medium	3	4	The UNJP will liaise closely with on-going initiatives of collating data and information and making this available to decision-makers and the public. It will also promote understanding of the need for sharing information and ensuring that all those with interest in marine and coastal biodiversity can access the information they need. The project will also encourage the use	UNEP and SPREP

Identified Risks and Type	**Risk Level** Likelihood X Impact	**Likelihood** Certain - 5 Likely - 4 Possible - 3 Unlikely - 2 Rare – 1	**Impact** Essential – 5 Major - 4 Moderate - 3 Minor - 2 Insignificant - 1	**Mitigation Measures**	**Responsible person. organization**
knowledge management does not materialize during the life of the UNJP.				of cost-effective, simple and easy to maintain processes and software for manageability.	
Programmatic The level of threat to biodiversity and ecosystem services is higher than assumed and the UNJP does not have adequate resources to expand the scope of its research, assessments and or to branch out into reactive work.	Medium	4	3	The UNJP will ensure thorough analysis of threats to biodiversity and ecosystem services is carried out. Where the threats significant and there is evidence of increasing deterioration, the UNJP will gradually increase capacity to address them, including at systemic level (e.g. policies, laws and finance) by inviting IFIs, bilateral and others to cooperate.	UNEP UNESCAP and UNESCO
Programmatic Ocean accounts are created but not put to use.	High	2	5	The UNJP will develop and explore various ways and modalities of implementing, communicating and capacity building to go hand-in-hand to increase the chances of the accounts being used to inform multisector.	ESCAP, MNRE
Programmatic Communities do not see the benefit of focus to be maintained on gender equality and inclusion.	Low	5	2	The UNJP will mitigate the risk by proactively communicating through those who are listened to and transparent planning. Partners will use part of the budget allocations to ensure that effective communication, awareness and public education are prioritized.	MNRE and SROS
Institutional Implementing partner organizations do no collaborate resulting in siloed work, possible duplication and inability	Low	3	3	Outcome 1 and Outcome 2 of the UNJP are dependent on collaboration among implementing partners. MNRE and SROS will play a lead project implementation role and their CEOs will ensure coordination and collaboration among the different entities.	CEO, MNRE CEO, SROS

Identified Risks and Type	**Risk Level** Likelihood X Impact	**Likelihood** Certain - 5 Likely - 4 Possible - 3 Unlikely - 2 Rare – 1	**Impact** Essential – 5 Major - 4 Moderate - 3 Minor - 2 Insignificant - 1	**Mitigation Measures**	**Responsible person. organization**
to gain from experience of one another.				The role delegated to other partners and stakeholders, whether formalized through or contracts or based in a principle of voluntary coordination will be clearly communicated and continuously clarified.	
Fiduciary Expectations from the UNJP are ambitious and disappoints stakeholders when quick wins or desires resources are no made available.	Low	3	2	Activities will be further elaborate in close collaboration with the partners, stakeholders and interested individuals to ensure that they have full understanding of the nature and scope of assistance.	UNEP, ESCAP, UNESCO

Annex 7

Further Notes on UNESCO-SROS Activity

Output 1.4.: Policy preparedness to govern safety, efficacy, regulation and bioethics of research in and use of medicinal plants.

Conservation of biological diversity and sustainable use of its components is of great importance for Samoa, with the growing understanding of the vast services we receive from ecosystems such as forests, wetlands, river, lakes and agricultural landscapes. Observations of traditional medicinal uses of our natural resources has seen an increase in research into the medicinal potential of natural resources to address modern diseases and ailments. Recently, this has also been the case for Samoa, with the launching of its Biodiscovery Center in 2018. The aim of the Centre is to research into the potential of Samoa's natural resources utilizing local scientists, whilst promoting the conservation of natural resources from which we depend on.

1.4.1: Development of a policy toolkit comprising of research report on ethical issues in micro-relationships between science and technology and professional use of herbal medicine and traditional knowledge, and recommended policy and/or legislative actions required to bridge the gap between ethics, research and practice for herbal medicine, which is supportive of genetic conservation and biodiversity, while ensuring compliance with international standards concerning medicinal research and bio-ethics. (US$ 40,000).

Policy Context for Action on Innovation and Access

International Policy

WHO

National policy on traditional medicine and regulation of herbal medicines – Report of a WHO global survey (2005)

- Various traditional medicine practices have been developed in different cultures in different regions, but without a parallel development of international standards and appropriate methods for evaluating traditional medicine.

Recommended key elements of a national policy:

- Definition of traditional medicine (TM) and complementary and alternative medicines (CAM)
- Provision for the creation of laws and regulations
- Consideration of intellectual property issues

WIPO

- Primarily concerned with "protection" in the IP sense of TK and GR (i.e. the protection against copying, adaptation and use by unauthorized parties).
- The objective, in short, is to ensure that the materials are not used wrongly. Two forms of protection:

- Positive protection – preventing unauthorized use of TK by third parties as well as active exploitation of TK by the originating community itself
- Defensive protection – strategies to ensure that third parties do not gain illegitimate or unfounded IPRs over TK subject matter and related GR are known as "defensive protection", such as measures to pre-empt or to invalidate patents that claim pre-existing TK as inventions

UNESCO's Declaration on Bioethics and Human Rights

- Promotes building and reinforcing linkages among ethicists, scientists, policy-makers, judges, journalists, and civil society to assist Member states in enacting sound and reasoned policies on ethical issues in science and technology.
- Requires set up of national bio-ethics committees, compliance measure through law and policy and periodic reporting.
- Requires coordination with the Intergovernmental Bioethics Committee (IGBC) and the International Bioethics Committee (IBC).

United Nations Declaration on the Rights of Indigenous Peoples (2007)

Article 31

1. Indigenous peoples have the right to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions, as well as the manifestations of their sciences, technologies and cultures, including human and genetic resources, seeds, medicines, knowledge of the properties of fauna and flora, oral traditions, literatures, designs, sports and traditional games and have visual and performing arts. They also have the right to maintain, control, protect and develop their intellectual property over such cultural heritage, traditional knowledge, and traditional cultural expressions.

Regional

The 'Model Law for the Protection of TK and Expressions of Culture' (SPC Model Law)

- Policy objective is to protect the rights of traditional owners in their TK and expressions of culture and permits commercialization, subject to prior and informed consent and benefit-sharing.
- Intended to complement (and not replace) conventional intellectual property laws
- To create new legal rights in TK and expressions of culture which may not previously have been protected, and may have been regarded as in the public domain by conventional intellectual property law

The 'Model Law for the Protection of Traditional Biological Knowledge Innovations and Practices' (SPREP Model Law)

- Developed to assist policy makers to develop national legislation for the protection of traditional biological knowledge, traditional biological innovations and traditional biological practices
- Intended to complement protection that may be provided under the conventional intellectual property laws

Local

Samoa currently has a Traditional Knowledge Stakeholders Working Group (MCIL, MESC, MWCSD, MNRE, NUS-CSS, STA, SROS, SQA, and SUNGO)

Report on the Protection of Samoa's Traditional Knowledge (2014) by the Samoa Law Reform Commission

- Samoa's TK has intrinsic cultural and spiritual value for Samoan people and thus vital for the sustenance and continued survival of traditional communities and lifestyles
- Existing laws do not provide adequate protections of Samoa's TK, and perhaps a *sui generis* legislation for the protection of TK should be developed
- Traditional communities raised concerns about the possibility that any new legislation may interfere with the use of TK by the traditional communities within the customary context.

Samoa's Biodiversity and ABS Work has included the development of policies and guidelines, focusing on three objectives:

1. To strengthen the legal, policy and institutional capacity to develop national ABS frameworks
2. Build trust between the "users" of Genetic Resources (GR) and "providers" of GR to facilitate the identification of bio-discovery efforts
3. To strengthen the capacity of indigenous and local communities to contribute to the implementation of the Nagoya Protocol on ABS.

Status of Traditional Knowledge and Associated Genetic Resources in Samoa and Options for Protection (2018)

- A situation analysis conducted to understand the status and trends of traditional knowledge and associated genetic resources in Samoa.
- Aims to provide evidence for decision-making in this regard.
- Highlights some of the valuable knowledge available in Samoa
- Presents options for profitably exploring these resources while protecting them from the threat of misuse, misappropriation and erosion.

Guidelines on Access and Use of Traditional Knowledge Associated with Genetic Resources of Samoa (2018)

- Provides guidance, instructions and directions on the use of traditional knowledge associated with genetic resources in the country

Traditional Knowledge associated with Genetic Resources (TKGR) database

- Protects and keeps track of Samoa's GR and associated TK once used in any research

Reference Websites

WHO Report

http://apps.who.int/iris/bitstream/handle/10665/43229/9241593237.pdf;jsessionid=14BAE38DF02124C63513EBC820B67E40?sequence=1

WIPO

https://www.wto.org/english/tratop_e/trips_e/trilatweb_e/ch2d_trilat_web_13_e.htm#_ednref12

UN Declaration on the Rights of Indigenous Peoples

https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf

Report on the Protection of Samoa's Traditional Knowledge

https://www.sprep.org/attachments/VirLib/Samoa/traditional-knowledge-samoa-2015.pdf