

National Environment Sector Plan (NESP) 2017 - 2021



Ministry of Natural Resources and Environment



Ministry of Natural Resources and Environment

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Private Mail Box

TATTE Building, Level 3

Apia, Samoa.

Telephone: +685 67200, Fax: +685 23176

www.mnre.gov.ws

*The National Environment Sector Plan
2017 - 2021*



Basic Information on Samoa

Government: Samoa is a Parliamentary democracy where the Parliament is elected through universal suffrage every five years. The Prime Minister and Cabinet manage the day to day affairs of the country. It has a unicameral Legislative Assembly consisting of 54 members, who are all *matais* (chiefly titleholders) and at least five are women elected by citizens aged 21 years and over. The Prime Minister selects 12 other parliamentarians to form a Cabinet. General elections are held every five years. The 1990 Village Fono Act gives Village Councils authority over village law and order, health and social issues.

Constitution: Established in 1960, the Constitution blends traditional and democratic institutions and processes and recognizes the separation of powers between the Legislature, Judiciary and Executive.

Legal system: Samoa has a Westminster legal system based on the English legal system as adopted by many of the Commonwealth countries.

Judiciary: Samoa's court system consists of two District courts and a Supreme Court manned by five local judges. An Appeal Court made up of overseas judges sits once a year to hear appeal cases. There is a separate Land and Titles Court that deals with matters relating to customary land ownership and 'matai' (chief) titles.

Land area: 2,820 km² made up of the two main islands of Upolu and Savai'i and seven small islands, with around 43% of land being arable.

Exclusive Economic Zone: The smallest in the Pacific at 98,500 km².

Population: Estimated 193,483 in Samoa; 19% Urban (2015).

Gross Domestic Product (GDP): Nominal GDP SAT\$1.9 Billion (FY 2014/15).
Real GDP SAT\$1.7 Billion (FY2014/15).

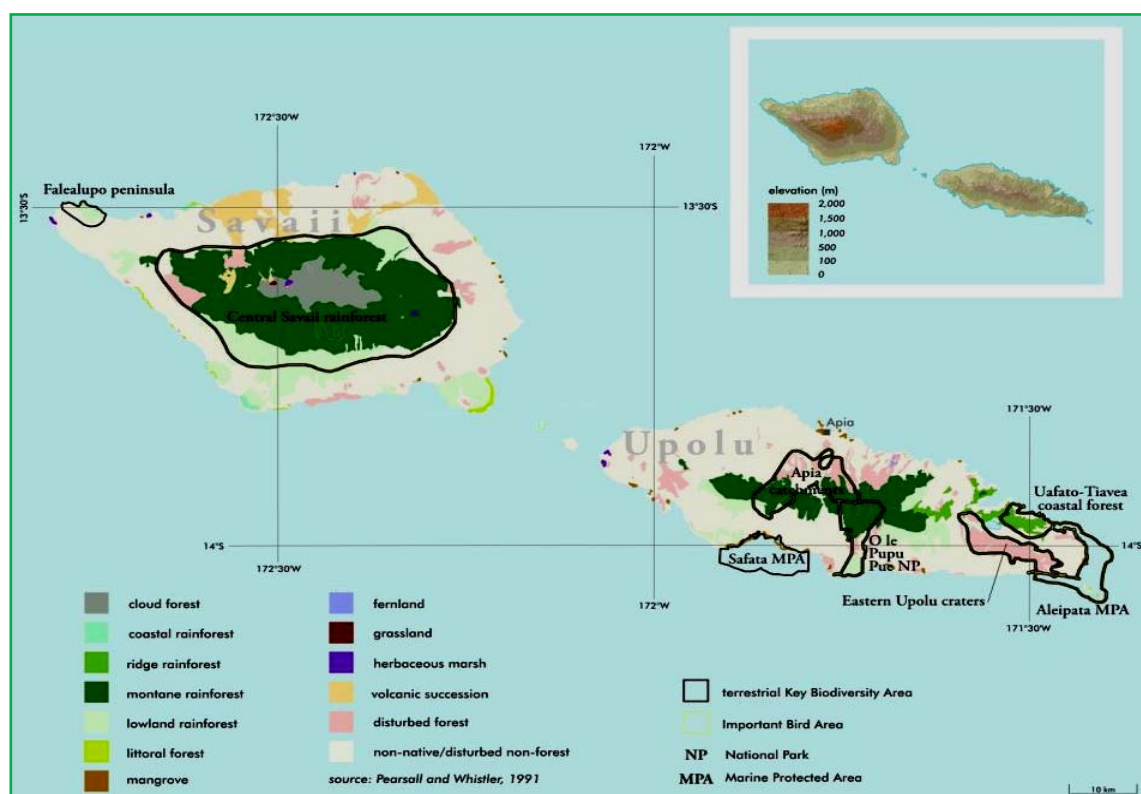
GDP composition: Real GDP; Primary sector 10%, Secondary sector 24%, Tertiary sector 66% (FY 2014/15).

GDP per capita (2011): SAT \$9,713; USD \$3,176.

Remittances: About 21.6% of GDP (2014/15).

Official languages: Samoan and English.

(Source: *Strategy for the Development of Samoa 2016-2020*)



Source: CI et al., 2010. *Priority Sites for Conservation in Samoa: Key Biodiversity Areas*. Apia, Samoa.

Foreword

I am both pleased and proud to present the second edition of the National Environment Sector Plan (NESP) for 2017 - 2021. The NESP is a compilation of efforts and contributions across the sector which I believe is a clear reflection of our collective responsibility as 'custodians' of the environment.

The NESP continues to provide the blueprint for the sustainable management and development of our limited and vulnerable natural resources, and the protection and conservation of our environment. The overarching goal of the Sector is 'enhanced environmental sustainability and climate and disaster resilience'. The NESP sets out four long term environmental outcomes which together frame the sector's strategic direction for this period in the context of current and emerging issues and challenges.



Most prominent of these challenges, is the real threat of climate change to low lying countries with vulnerable economies such as Samoa. We have experienced over the years and most recently with Tropical Cyclone Evan, accompanied by a 1 in 100 year flood event, how good progress achieved over many years of dedicated efforts can be reversed in a matter of days. Disaster recovery programmes are costly and can take years to implement, delaying development progress even further. The increasing frequency and intensity of tropical cyclones is therefore a major concern. The impacts of climate change are enormous and are a 'priority policy determinant' for Samoa in which all of us have a role to play. Citizens, institutions and government.

The NESP provides the platform and impetus needed for coordinated action and responsibility amongst us to achieve environmental sustainability, climate and disaster resilience. We are at a critical time where we cannot afford to treat environmental issues in isolation from economic and social developments.

Our institutions be they government, private or non-governmental including churches, should be adequately equipped and resourced to deal with environmental and socio-economic development issues in an integrated and holistic approach.

The successful implementation of the NESP is very much dependent on the capacity of institutions to fulfill their roles. Resource mobilization to augment capacity development is fundamental and we call for continuous support of our development partners, the donor community, to buy into this Sector Plan which articulates sector priorities and where resources are urgently needed.

I am happy to reaffirm the government's support in achieving the Sector's overarching goal. This is demonstrated in the current SDS 2016 - 2020 which recognizes the environment as one of the four priority areas underpinning Samoa's sustainable development goals to achieve its national vision for 'an improved quality of life for all'

Finally, I would like to sincerely acknowledge and thank the efforts of everyone who has contributed to the development of the NESP. Malo lava! To our development partners, I thank you on behalf of the Government and acknowledge your genuine partnership and support over the years. In particular, I would like to acknowledge GEF and UNDP for their financial support in bringing this work to fruition under the Rio Project.

Faafetai tele,

A handwritten signature in black ink, reading 'Fiame N. Mataafa'.

Afioga Fiame Naomi Mataafa

Hon. Deputy Prime Minister and Minister for Natural Resources and Environment.

Acknowledgments

We acknowledge with appreciation the invaluable input of various stakeholders and development partners of the Environment Sector in the development of the updated NESP 2017 - 2021. We thank all the representatives of public sector agencies, private sector, non-governmental organisations, academia and communities who participated and contributed through extensive stakeholder consultations, sector annual reviews and targeted community consultations. We acknowledge the leadership role of the National Environment Sector Steering Committee (NESSC), the Chairman and members in the review and finalisation of the NESP prior to its endorsement. We are indebted to you for your time and efforts and true spirit of collaboration and partnership! Thank you all so much.

We highly anticipate a continuing strong partnership network with you all as we shift our focus to implementation and equally crucial, monitoring and evaluation of the NESP to ensure we are on target to achieve our collective goals and objectives pursued through this framework.

Ia faamanuia le Atua i o outou faiva alofilima ma le mafau fau aua se manuia o Samoa ma ona tagata.

Faafetai, Faafetai tele lava.

Executive Summary

The National Environment Sector Plan (NESP) 2017 - 2021 updates the NESP 2013-2016. It is based on the most recent State of the Environment (SOE) assessment documented in 2013, lessons learned from the previous NESP and outcomes of the Sector SWOT Analysis, which was conducted as part of the NESP review and update process.

The NESP articulates the roadmap for the Environment Sector for the period 2017 - 2021. It outlines the sector's vision, goal and an achievable framework for action, in line with the Strategy for the Development of Samoa (SDS) 2016-2020, the sector policy and legislative framework and regional and international obligations under various multilateral environmental agreements, Samoa has ratified to date. The roadmap consists of four (4) Long Term Outcomes (LTOs) under which fifteen (15) End of Sector Plan Outcomes (ESPO) will be pursued.

The four long term outcomes are:

- a) Long Term Outcome 1: Sustainable management and development of natural resources and environment improved;
- b) Long Term Outcome 2: A more sustainable and resilient built environment;
- c) Long Term Outcome 3: Climate Change and Disaster Risk Management mainstreamed across all sectors; and,
- d) Long Term Outcome 4: Effective enabling environment.

Institutional arrangements for the sector are set out in the NESP with roles and responsibilities of identified implementing agencies clarified for coordination purposes. There are five groups of Implementing Agencies (IAs) including public sector agencies; the private sector; non-governmental organisations; academic institutions and small grants' schemes.

The coordination framework for the Sector will make use of existing coordination mechanisms where feasible. There are four main subsectors: (1) natural resources and environment conservation; (2) resilient built environment; (3) mainstreaming climate change and disaster risk management; and (4) sector governance. The National Environment Sector Steering Committee (NESSC) provides overall leadership and oversight of the NESP and its progress of implementation.

The Medium Term Expenditure Framework (MTEF) for the Sector from 2017 - 2021 has been developed as part of the NESP. The MTEF captures both recurrent and investment costs integrating national and external funding sources, and maps out where resources are available and where resources are needed. Indicative costs for the full implementation of the NESP's five year programme is estimated at \$467 million Tala. Investment needs are considerably higher and account for 73 per cent (\$339 million Tala) of total financing needs, while recurrent costs account for 27 per cent (\$128 million Tala). LTO 1 has the highest financing needs at approximately \$273 million Tala, accounting for a significant 59 per cent of the sector's total financing needs, followed by LTO 2 at 26 per cent, LTO 3 at 10 per cent and LTO 4 at 5 per cent. An estimated 76 per cent (\$353 million Tala) of the sector's financing needs is secured through government funding and external grants. Total shortfall of funds is estimated at 24 per cent or \$111 million Tala.

Fifty high level indicators have been identified for the NESP in addition to key performance indicators linked to costed action plans. Sector monitoring, reviews and reporting will be carried out through:

- a) quarterly reporting to the NESSC;
- b) national budget planning, mid-term and full term budget reviews facilitated by Ministry of Finance (MOF);
- c) annual planning and reviews of management plans or operational plans of IAs; and
- d) Sector annual reviews.

Operational plans for the NESP constitute the Outcomes Map for the Sector, costed action plans, medium term expenditure frameworks and performance management frameworks for identified end of sector plan outcomes to facilitate the day to day management and operations of the NESP.

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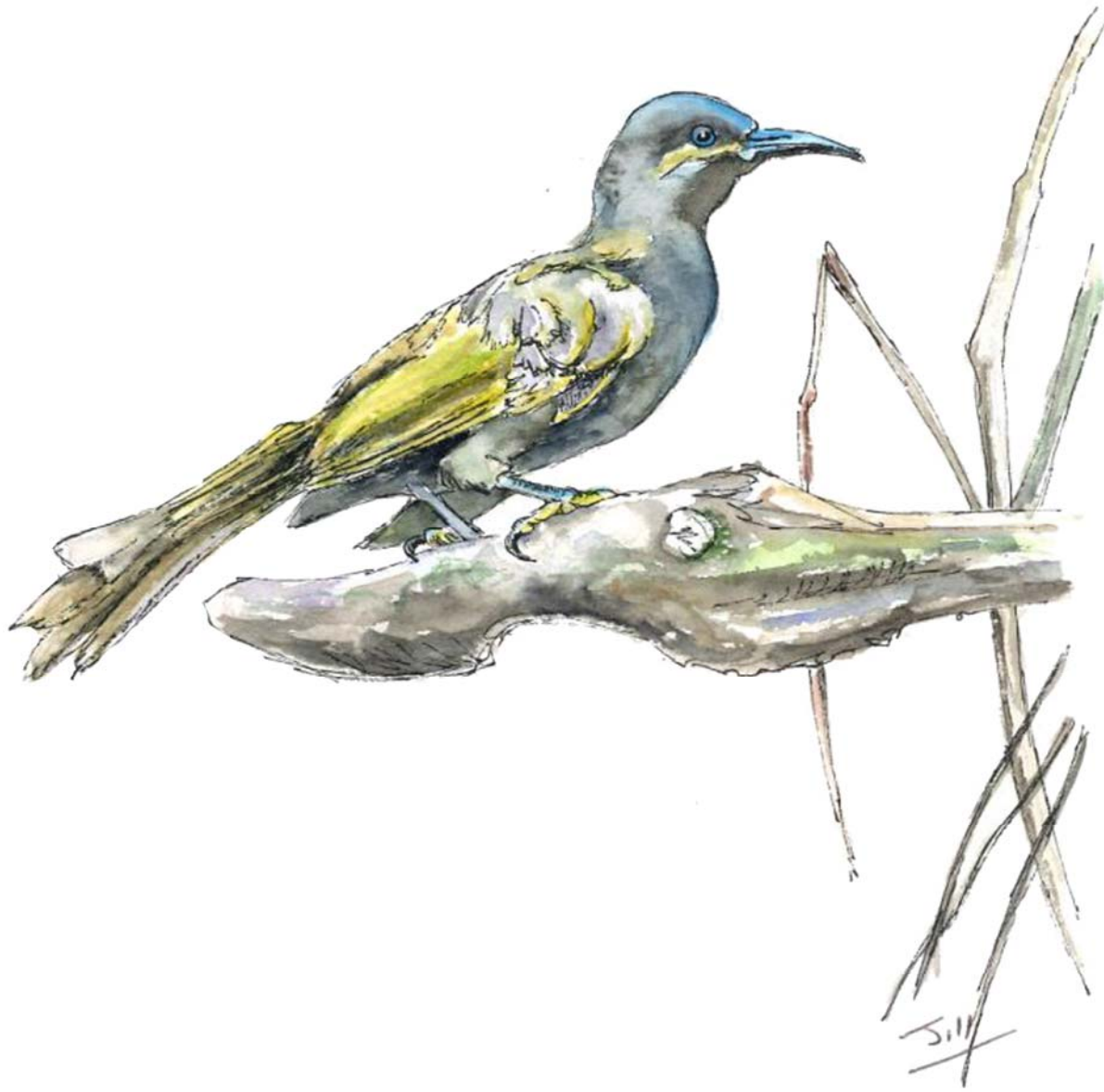
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List of Acronyms

ACEO	Assistant Chief Executive Officer
ASP	Agriculture Sector Plan
BIORAP	Biological Rapid Surveys
CDC	Cabinet Development Committee
CEO	Chief Executive Officer
CI	Conservation International
CIM	Community Integrated Management Plan
CLAC	Customary Land Advisory Commission
COC	Chamber of Commerce
COSPPac	Climate and Oceans Support Program in the Pacific
CSI	Coastal Survey Index
CSSP	Civil Society Support Programme
DKIF	Data and Knowledge Management Facility
DPSIR	Drivers-Pressures-Stresses-Impacts-Responses
EPC	Electric Power Corporation
ESPO	End of Sector Plan Outcomes
EU	European Union
EWACC	Economy-wide Integration of Climate Change Adaptation and Disaster Risk Management
FAO	Food and Agriculture Organisation
FPAM	Forest and Protected Areas Management
GCF	Green Climate Fund
GDP	Gross Domestic Product
GEF	Global Environment Facility
GHG	Green House Gas
HLDO	High Level Development Outcome
IA	Implementing Agency
ICCRIFS	Integrating Climate Change into the Forest Sector
IMPRESS	Improving the Performance and Reliability of Renewable Energy Power Systems in Samoa
INDC	Intended Nationally Determined Contributions
IRIS	Indicator Reporting Information System
IT	Information and Technology
IWRM	Integrated Water Resources Management
KBA	Key Biodiversity Areas
KO	Key Outcome
LDD/LDN	Land Degradation and Drought / Land Degradation and Neutrality
LTA	Land Transport Authority
LTO	Long Term Outcome
MAF	Ministry of Agriculture and Fisheries
MCIL	Ministry of Commerce Industry and Labour
MCIT	Ministry of Communications and Information Technology
MEAs	Multi-lateral Environmental Agreements
MESC	Ministry of Education Sports and Culture
METI	Matuaileoo Environment Trust Incorporated
MFAT	Ministry of Foreign Affairs and Trade
MNRE	Ministry of Natural Resources and Environment
	<i>CORP/CSU: Corporate Services Division</i>
	<i>DEC: Div of Environment & Conservation</i>
	<i>DMO: Disaster Management Office</i>
	<i>ECD: Environment Coordination Division</i>
	<i>FOR: Forestry Division</i>
	<i>GEF: GEF Division</i>
	<i>ICT: IT Division</i>
	<i>LMD: Land Management Division</i>
	<i>WRD: Water Resources Division</i>
	<i>Legal: Legal Division</i>
	<i>MET: Meteorology Division</i>
	<i>PUMA: Planning & Urban Management Agency</i>
	<i>RED: Renewable Energy Division</i>
	<i>TECH: Technical Division</i>
	<i>WSCU: Water Sector Coordination Unit</i>

MOF	Ministry of Finance
MOH	Ministry of Health
MOR	Ministry of Revenue
MPMC	Ministry of the Prime Minister and Cabinet
MTEF	Medium Term Expenditure Framework
MWCSD	Ministry of Women Community and Social Development
MWTI	Ministry of Works Transport and Infrastructure
NAMA	Nationally Appropriate Mitigation Actions
NAP	National Action Program to Combat Land Degradation and Mitigate the Effects of Drought 2015-2020
NAPA	National Adaptation Programme of Action
NBSAP	National Biodiversity Strategy and Action Plan 2015-2020
NCP	National Chemical Profile
NDMP	National Disaster Management Plan 2016-2019
NECC	National Energy Coordination Committee
NEMS	National Environment Management Strategy
NESP	National Environment Sector Plan
NESSC	National Environment Sector Steering Committee
NGO	Non-Governmental Organisation
NUS	National University of Samoa
OAG/AGO	Office of the Attorney General
ODS	Ozone Depleting Substances
OOTR	Office of the Regulator
PAS	Plumbers Association of Samoa
PREP	Pacific Resilience Program
R2R	Ridge to Reef
SBS	Samoa Bureau of Statistics
SCS	Samoa Conservation Society
SDGs	Sustainable Development Goals
SDS	Strategy for the Development of Samoa
SFFI/SSFI	Samoa Federated Farmers Incorporated
SGP	Small Grants Programme
SHA	Samoa Hotels Association
SMERF	Samoa Monitoring, Evaluation and Reporting Framework
SMSMCL	Strengthening Multi-Sectoral Management of Critical Landscapes
SOE	State of the Environment
SPA	Samoa Ports Authority
SPC	Pacific Community
SPREP	Secretariat of the Pacific Regional Environment Programme
SROS	Scientific Research Organisation of Samoa
STEC	Samoa Trust Estate Corporation
STA	Samoa Tourism Authority
SWA	Samoa Water Authority
SWOT	Strengths, Weaknesses, Opportunities and Threats
TAACC	Technical Assistance to Address Climate Change
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
USP	University of the South Pacific
WB	World Bank
WIBDI	Women in Business Development Incorporated

Introduction



*“The ma’oma’o bird, *Gymnomyza samoensis*, is endemic to the Samoa archipelago but is now only found in the Independant State of Samoa”*

1. Introduction

1.1 Background

1.1.1 State of Samoa's Biophysical Environment

Samoa's state of the environment report 2013 provides in-depth situational analysis for the NESP. It establishes the state of health of Samoa's biophysical environment, based on the health of eight habitat types, that were assessed in the context of cause-effect relationships, categorized as (a) 'Drivers' of environmental change; (b) 'Pressures' on the environment; (c) 'State' of the environment; (c) 'Impacts' on people, economy and environment; and (d) 'Responses' to address identified environmental problems.

Key drivers and pressures causing environmental change are presented in Table 02, to which the NESP is designed to address, to improve and restore the health of Samoa's biophysical environment overall. The SOE 2013 therefore provides the context for which strategic responses outlined in the NESP are informed and guided by.

Table 01: The 8 Habitat Types/Sector Domain (Source: SOE 2013).

Habitats	Key focal areas
1. Marine / Offshore	Corals/coral reefs, seamounts and marine species
2. Coastal	Mangroves and wetlands
3. Lowland	Coastal forests and strand vegetation Coastal marshes, beaches. Cultivated areas and lowland forests.
4. Upland	Upland and cloud forests
5. Freshwater bodies, rivers and stream	Rivers and streams. Lakes, freshwater springs. Groundwater aquifers, riparian zones and wetlands
6. Built environment	Population, housing, sanitation, waste, environmental safeguards, energy consumption
7. Protected areas	Protected areas, sanctuary and KBAs
8. Atmosphere, weather and climate	GHG emissions, ODS, NAPA implementation

Table 02: Identified Drivers and Pressures for Environmental Change (Source: SOE 2013).

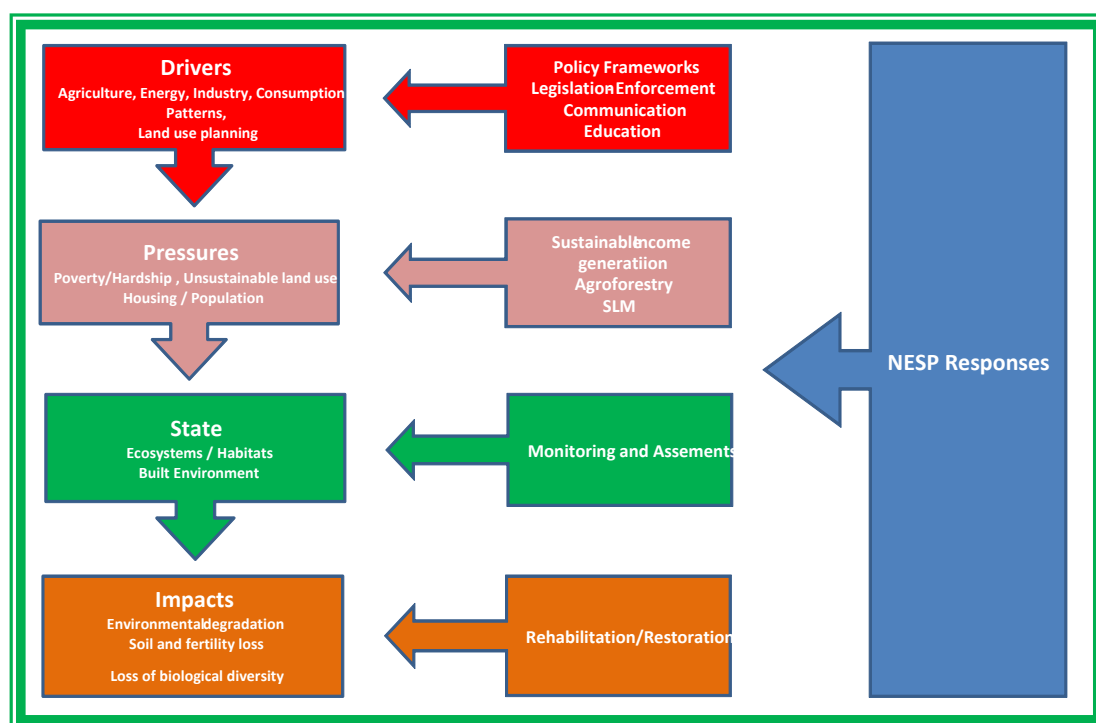
Drivers of Environmental Change	Pressures on Samoa's Environment
D1. Geographical smallness and isolation	P1. Invasive Species
D2. Demographics	P2. Waste and Environmental pollution
D3. Access to resources and land tenure systems	P3. Atmospheric pollution and greenhouse gases
D4. Economic development	P4. Natural disasters
D5. Changing consumption patterns and lifestyles	P5. Unsustainable exploitation of resources
D6. Climate change and climate variability	P6. Land based pollution
	P7. Poor sanitation
	P8. Poorly planned development activities

Figure 01, illustrates the different entry points and pathways that the NESP, in response to key identified drivers, will use to address environmental management and development issues. It will generally focus on the need to:

- strengthen policy and legislative frameworks;
- ensure coherent and integrative frameworks are in place and implemented accordingly;
- strengthen enforcement and compliance;
- integrate socio-economic issues such as poverty and hardship to achieve environmental sustainability and resilience to impacts of climate change and disasters;

- revisit and improve communication strategies and approaches to increase the effectiveness of ongoing awareness and educational programs to foster positive behavioral change; and
- ensure access to quality and timely environmental information.

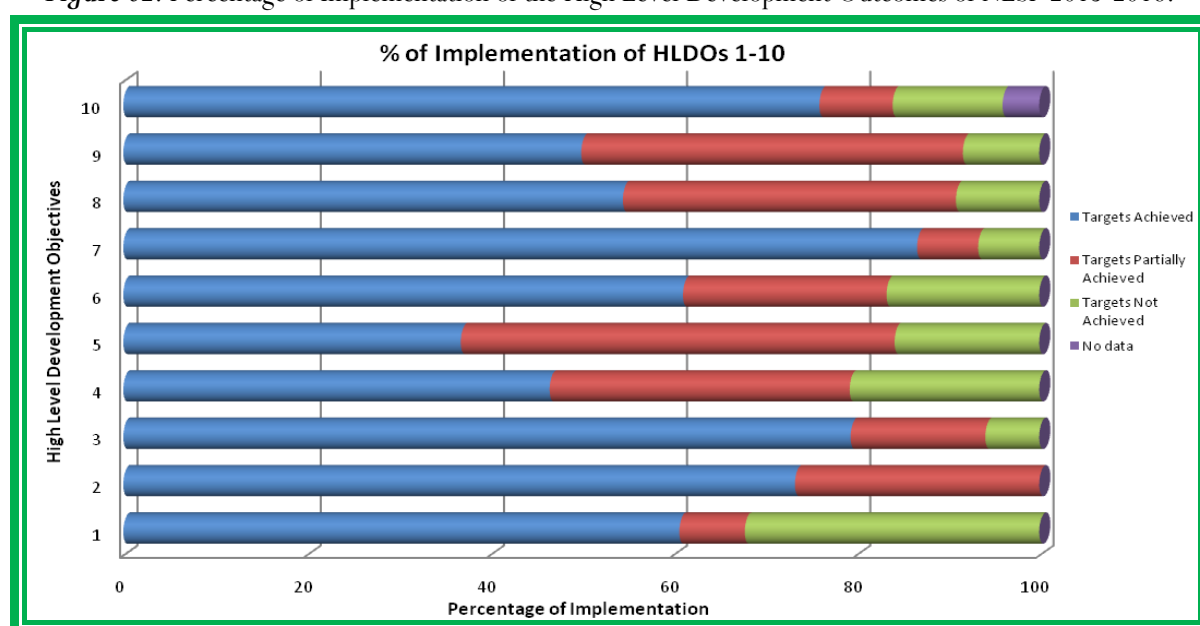
Figure 01: SOE - NESP Conceptual Framework.



1.1.2 The NESP Review

The NESP 2013 - 2016 achieved good substantive progress overall. Its status of implementation has been reviewed with extent of implementation estimated at 92 per cent. Of this percentage, 71 per cent of identified targets were successfully achieved, and the remaining partially achieved or ongoing. Figure 02 below illustrates the extent of implementation of the previous NESP.

Figure 02: Percentage of Implementation of the High Level Development Outcomes of NESP 2013-2016.



The key achievements noted by the review include:

- Strengthened protection and maintenance of habitats and species through improved management of key biodiversity areas including community conservation areas, marine protected areas, national parks and reserves;
- Increased restoration of degraded habitats and improved conservation of threatened species;
- Enhanced resilience of the built environment through ongoing improvements to solid waste management, climate proofing of infrastructure and coastlines, piloting of renewable energy alternatives and energy efficient technologies;
- Increased replanting and ecosystem restoration programs with communities;
- Increased access to sanitation and compliance with basic sanitation standards;
- Improved information and knowledge management with the establishment of a centralised information management facility or DKIF;
- Improved efforts to reducing green house gas emissions with the implementation of low carbon initiatives; increased promotion of renewable energy pilots and use of energy efficient technologies and Ozone Depleting Substances (ODS) alternatives;
- Increased participation of communities and stakeholders in environmental management initiatives through ongoing community based programs and policy and planning consultations and dialogues;
- Improved sector coordination with establishment of coordination unit and national environment sector steering committee;
- Enhanced enabling environment and governance arrangements as a result of continuing institutional reviews including functional analyses to improve efficiency and effectiveness of services;
- Improved dialogue and platform to facilitate genuine and durable partnerships with development partners;
- Ongoing capacity building programs for improved institutional capacities of IAs.

Outstanding NESP Activities

The review noted a number of outstanding activities and targets from the previous NESP. As part of the NESP review process, validation of these outstanding activities and targets to continue on into the updated NESP was undertaken. This involved a review of their relevance, availability of resources and the required capacity to implement them as part of the new programme. Chief among outstanding targets, are plans to legalize Samoa's protected area network and development of environmental guidelines. As such, will continue to receive priority attention from the Sector.

For waste management, formulation of a national waste minimization strategy and implementation of the proposed container deposit levy remain key priorities for implementation. Developing a response plan and tracking system for chemicals and hazardous materials will continue to be prioritised including work towards finalising the national effluent standards for Samoa.

Continuing priorities for renewable energy such as the finalisation of the NAMA, upscaling of low carbon developments, targeting key sectors such as energy and transport and where feasible the rolling out of biogas digester systems have also been integrated. The development of Samoa's 3rd national communication report to the UNFCCC remains a key priority and will be addressed as part of the Sector's overall climate change mitigation efforts which will include the review and update of the GHG Abatement strategy and implementation of an air pollution monitoring program.

Strengthening information and knowledge management remains a key concern in the NESP. Work towards a fully operational DKIF, planning and execution of the next state of the environment assessment for Samoa will remain key features of a strengthened governance subsector in the five years of the NESP.

Ongoing awareness and educational programs will continue to be featured prominently throughout the current NESP's framework. The level of environmental awareness with respect to the effectiveness of awareness programs will be assessed as part of the household environment survey proposed in the new NESP.

1.1.3 Sector SWOT Analysis

The Sector conducted a SWOT Analysis to identify sector strengths, weaknesses, opportunities and threats through a participatory approach. Four key groups of stakeholders participated; MNRE, the Public and Private Sectors, Environmental NGOs and Development Partners. More than five hundred responses were analysed and summarised in Figure 03. These findings provided further guidance and context to the updated framework of the NESP.

Figure 03: Summary of the Sector SWOT Analysis.

Strengths	- Sector coordination - Increased focus on renewable energy - Increased awareness on environment and climate change - Invasive species control programs - Replanting and rehabilitation - Baseline data collection - Community engagement and outreach - Open and regular dialogue with Development Partners - Partnership with private sector and NGOs	Weaknesses	- Alignment of policies and plans - Impact studies and assessments - Accessibility to information/data - Evidence based policy planning - Institutional capacity - Coordination - Enforcement - Procurement - Monitoring and Enforcement
Opportunities	- Green jobs - Samoa as a Green destination - Tax reforms (tax rebate for car batteries) and for energy efficient appliances - Greater participation of churches and communities - Cross-sectoral coordination - Public private partnerships - Research through USP and NUS - International and regional support - Monitoring and Evaluation - Centralized database for sector statistics	Threats	- Loss of technical expertise and institutional knowledge - High staff turnover - Climate Change and natural disasters - Project fatigue - too many projects - Declining external funding and government budget - Overwhelming reporting, monitoring and evaluation processes - Maintaining community engagement, trust and interest - Uncoordinated communication with communities - Community fatigue - Contradicting government priorities - Pressure from economic sectors

1.2 Purpose of the NESP

The NESP articulates the roadmap for the Environment Sector for the period 2017 - 2021. It updates the NESP 2013-2016, building on its achievements and lessons learned. The NESP outlines the sector's vision, goal and an achievable framework in line with the SDS 2016-2020, the sector policy and legislative framework as well as its numerous and various regional and international obligations. The framework consists of four (4) long term outcomes under which fifteen (15) end of sector plan outcomes will be pursued to achieve its overarching goal.

Indicative costs for the full implementation of the NESP's five year programme have been estimated and are outlined in the document forming the sector's full MTEF. The MTEF captures both recurrent and investment costs from national and external funding sources and maps out where resources are available and where resources are needed.

Moreover, the NESP identifies the implementation arrangements for the sector which includes clarification of institutional roles and responsibilities of identified IAs and coordination mechanisms to facilitate sector wide planning, implementation, monitoring and reviews, evaluation and reporting under the guidance and leadership of the National Environment Sector Steering Committee.

The performance management framework with which to track progress of implementation is defined in the NESP and provides the basis for sector annual reviews, monitoring and evaluations. SOE assessment indicators are presented in the NESP as high level indicators to measure the impacts of NESP interventions.

These have been mapped out against the SDS strategic outcomes and relevant SDGs. The timing of SOE assessments is critical in the development of the next NESP.

1.3 Sector Planning Process

The NESP was developed through an extensive consultative process involving a wide range of sector stakeholders. This included three sector annual reviews for financial years 2013/14, 2014/15 and 2015/16 respectively; NESP benchmarking exercises; Sector SWOT Analysis workshops; as well as Participatory Outcomes Mapping workshops. One on one sessions with individual IAs were also held to validate NESP contributions, in addition to focus group consultations targeting private sector partners, NGOs and public sector agencies. Moreover, consolidation of the NESP's comprehensive framework for action benefitted from ongoing community engagement processes involving sector IAs .

Feedback from budget and management planning reviews of MNRE, including institutional reviews, provided useful insights in finalising the NESP. This included, a review of relevant corporate plans, to ensure the Sector's strategic framework is in line with mandated roles and responsibilities of its IAs. Lastly the Ministry of Finance (MOF) conducted trainings to introduce and test the Samoa Monitoring, Evaluation and Reporting Framework (SMERF). The trainings facilitated the development of the Sector's Monitoring and Evaluation framework.



National Policy Context

“The black skink, Eumeces nigrus, is the largest of all skink species of Samoa.”

2. National Policy Context

2.1 The Strategy for the Development of Samoa (SDS) 2016 - 2020

The SDS 2016 - 2020 provides the overarching framework, that sets the pace and tone, of Samoa's sustainable and resilient development. Pillared by four interlinked priority areas¹, the SDS sets national goals in the form of fourteen (14) Key Outcomes to be delivered through fourteen (14) prioritized sector wide programmes.

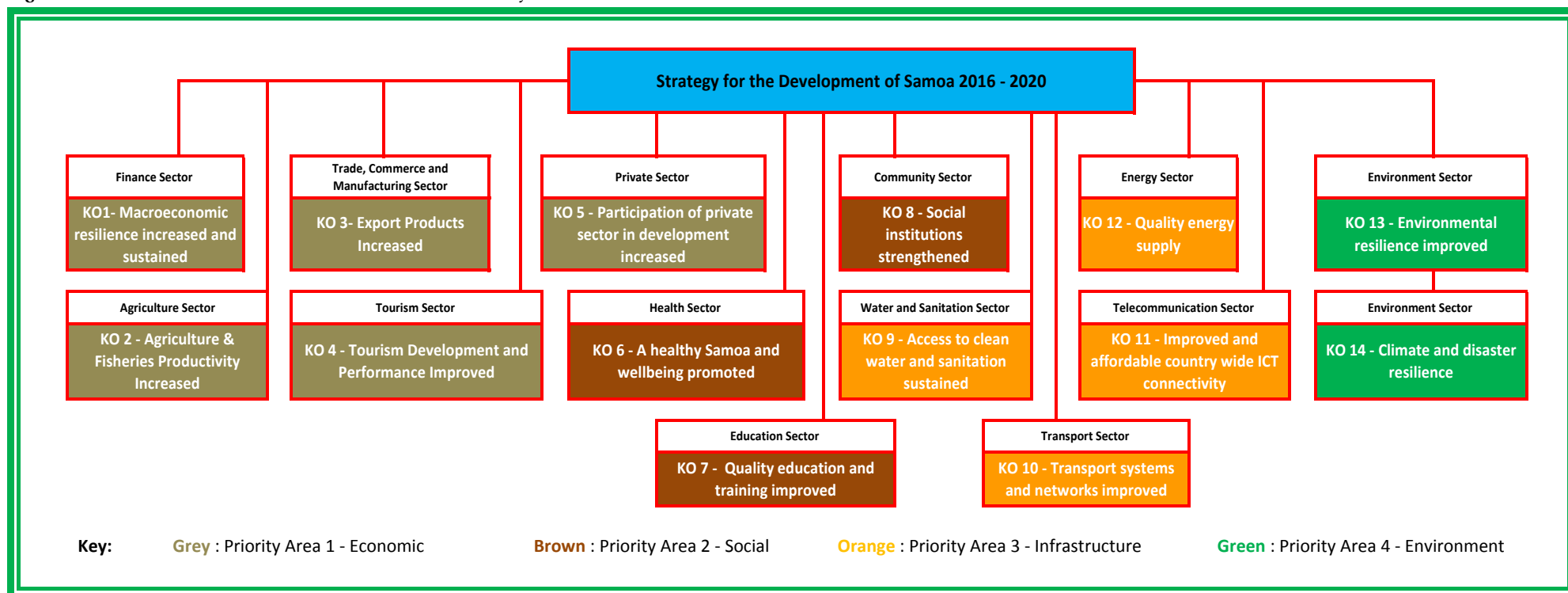
Environment is a national priority and has two key outcomes, pursued under the Environment Sector: key outcome thirteen (13) on improved environmental resilience; and key outcome fourteen (14) on climate and disaster resilience. Owing to the cross cutting nature of environmental issues and the important role of natural resources such as land, water, forests, oceans and fisheries in economic and social developments, the achievement of sector outcomes will contribute significantly to the realisation of other key outcomes under the economic, social and infrastructure sectors (see Table 03). At the same time, it should be noted, that the scope and scale of developments in these sectors, if left unchecked, will have unavoidable impacts on the environment and ecosystems, and could result in reversing any good progress achieved under the environment sector. Cross-sectoral coordination, a deeper understanding and respect of the inter-linkages between all 4 pillars of development is crucial. Figure 04 illustrates the 14 SDS Key Outcomes and their designated sectors under the four national priority areas. Note that the Justice Sector is included in this context as part of the Community Sector.

Table 03: Key Sectors Benefitting from the Environment

Environment Sector	Other Sectors
Priority Area 4 – Environment Key Outcome 13: Environmental resilience improved Key Outcome 14: Climate and disaster resilience	Priority Area 1 – Economic Key Outcome 2: Agriculture and Fisheries Productivity Increased Key Outcome 3: Export Products Increased Key Outcome 4: Tourism Development and Performance Improved Priority Area 2 – Social Key Outcome 6: A healthy Samoa and wellbeing promoted Key Outcome 8.1: Community Development Enhanced Priority Area 3 – Infrastructure Key Outcome 9: Access to clean water and sanitation sustained Key Outcome 10: Transport systems and networks improved Key Outcome 12: Quality energy supply

¹ SDS four priority areas (1) the economic sector; (2) the social sector; (3) the infrastructure sector; and (4) the environment Sector.

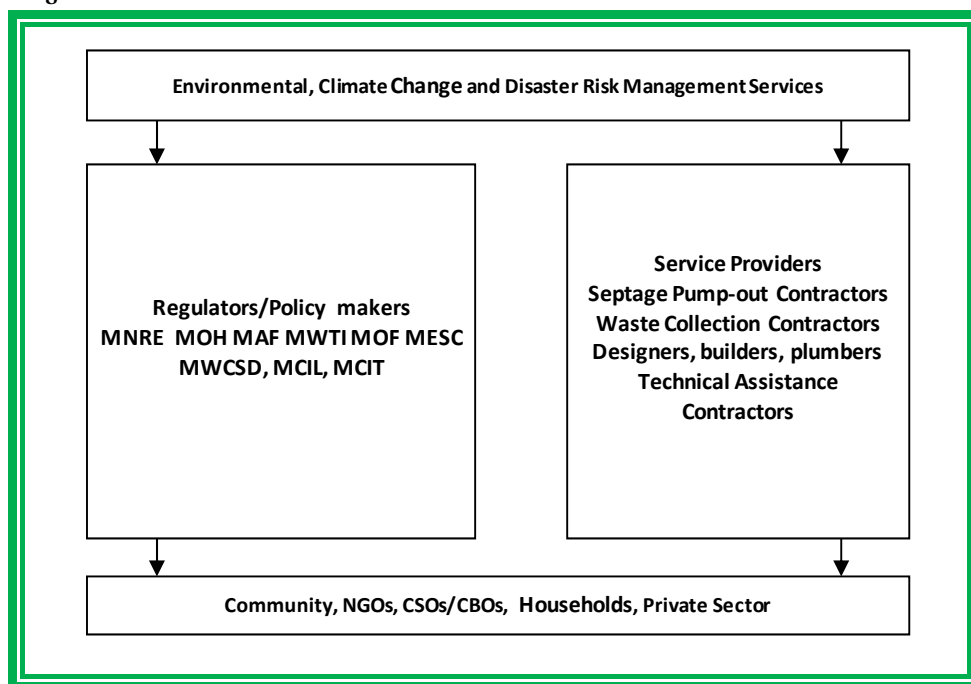
Figure 04: Illustration of the SDS 2016-2020 Sectors and Key Outcomes.



2.2 Sector Policy and Legislative Framework

The wide array of policies and legislative mandates, mirror the scope and complexity of environmental issues, addressed within the sector. These frame the mandated functions performed by the Sector particularly through the MNRE, as lead implementing agency, responsible for all environmental matters and issues at the national level. While there is a clear distinction between policy maker/regulator and implementer roles in general, there are a few areas, where some IAs are performing dual roles. Figure 05 depicts the sector's governance model.

Figure 05: Sector Governance Model.



A list of key policies and legislative frameworks governing the work of the Sector is highlighted below:

Sector Policies

1. Reclamation Policy 2000
2. Land Valuation Licensing Policy 2000
3. Land Surveying Licensing 2000
4. National Water Resource Policy 2010
5. National Bio-prospecting Policy 2001
6. National Land use Policy 2001
7. National Population and Sustainable Development Policy 2001
8. National Waste Management Policy 2001
9. National Bio-Safety Policy 2004
10. National Heritage Policy 2004
11. National Policy on the Conservation of Biological Diversity 2007
12. National Policy on Forestry for Sustainable Development 2007
13. Parking Policy and Standards 2006
14. National Signage Policy 2006
15. National Noise Policy 2006
16. National Policy on Combating Climate Change 2007
17. National Policy for Licensing Surveyors 1999

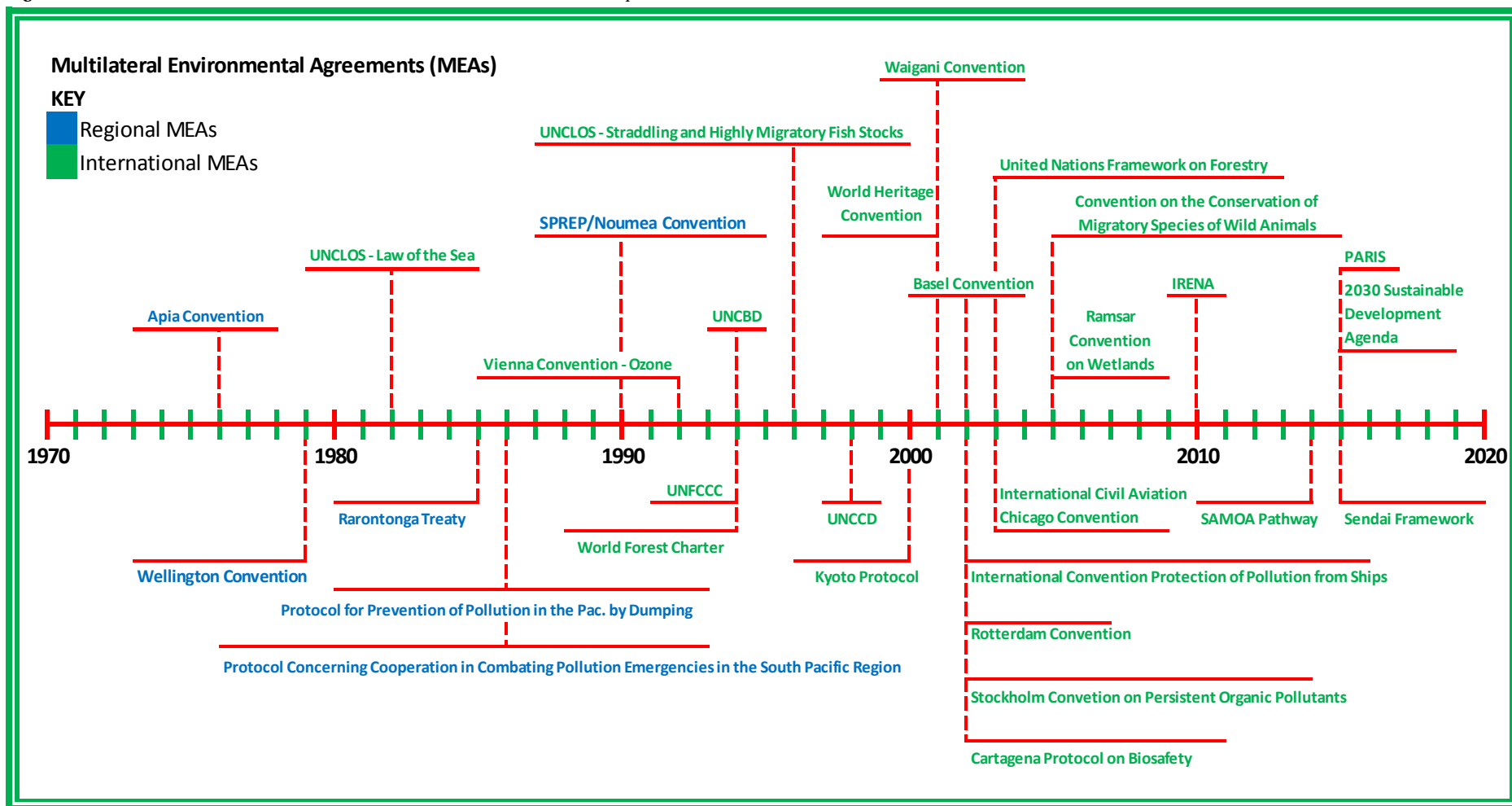
Sector Legislative Frameworks

1. The Stevenson Memorial Reserve and Mount Vaea Scenic Reserve Ordinance 1958.
2. Constitution of the Independent State of Samoa 1960
3. The Survey Ordinance 1961
4. Noxious Weeds Ordinance 1961
5. The Taking of Land Act 1964
6. The Alienation of Customary Land Act 1965
7. The Land Titles Investigation Act 1966
8. Forest Act 1967
9. Exclusive Economic Zone Act 1977
10. Plants Act 1984
11. The Lands, Surveys and Environment Act 1989
12. The Land for Foreign Purposes Act 1992/1993
13. Maritime Act 1999
14. Public Finance Management Act 2002
15. Planning & Urban Management Act 2004
16. Public Service Act 1977 & Amended Act 2004
17. Disaster & Emergency Management Act 2007
18. Land Titles Registration Act 2008
19. Water Resources Management Act 2008
20. Unit Titles Act 2010
21. Waste Management Act 2010
22. Spatial Information Agency Act 2010
23. Forest Management Act 2011
24. Customary Land Advisory Commission Act 2013

2.3 Regional and Global Frameworks

The Sector has various obligations under a number of multi-lateral environmental agreements (MEAs) and frameworks. Careful consideration has been made, through relevant implementing focal points, to ensure these commitments are reflected in the NESP's five year strategic framework. Figure 06 presents a timeline of MEAs Samoa has ratified and frameworks it has adopted to date.

Figure 06: A timeline of MEAs and frameworks Samoa has ratified or adopted.



Strategic Framework for Action



*"The two most commonly found turtles
in Samoa are the green turtle and the
hawksbill turtle."*

National Vision:

An Improved Quality of Life for All

Sector Vision:

Samoa's natural and built environment are well protected and resilient to natural and human-induced hazards, and supporting a sustainable and healthy human population.

Sector Goal:

Enhanced environmental sustainability and climate and disaster resilience

3. Long Term Outcomes

Four (4) LTOs have been identified in pursuit of the Sector's overarching goal. They consolidate the ten High Level Development Outcomes (HLDOS) from the previous NESP and frame the Sector's strategic direction for the next five years. The achievement of these LTOs will be realised progressively through fifteen identified ESPOs (see Table 05). The LTOs correspond to the SDS strategic outcomes for the Environment Sector as shown in Table 04 below:

Table 04: NESP Long Term Outcomes and SDS Strategic Outcomes

<i>Long Term (LTO) Outcomes</i>	<i>SDS Strategic Outcomes for the Sector</i>
<i>Long Term Outcome 1: Sustainable management and development of natural resources and environment improved.</i>	• <i>Number of key habitats and 'at risk' species protected increased</i> • <i>Areas of forests and marine sites protected increased</i> • <i>Protection Plans implemented for 'at risk' species</i> • <i>Conservation areas protected and increased</i> • <i>Cumulative total hectares of prioritized watershed areas rehabilitated and/or declared reserves increased</i>
<i>Long Term Outcome 2: A more sustainable and resilient built environment</i>	• <i>New buildings are 100% compliant with disaster and climate resilience standards</i> • <i>100% capacity for renewable energy electricity by 2025</i> • <i>Access to improved sanitation standards</i>
<i>Long Term Outcome 3: Climate Change and Disaster Risk Management mainstreamed across all sectors</i>	• <i>Climate and Disaster Resilience planning improved</i> • <i>Climate and disaster resilience and responsive planning improved</i> • <i>Climate and disaster resilience integrated into all sector plans, Ministry and implementing agencies corporate plans</i> • <i>100% compliance of Ministries and implementing agencies with climate and disaster resilience plans</i>
<i>Long Term Outcome 4: Effective enabling environment</i>	• <i>Environmental compliance strengthened</i>

Table 05: Summary of NESP 2017-2021 Strategic Framework

OVERARCHING GOAL: ENHANCED ENVIRONMENTAL SUSTAINABILITY AND CLIMATE AND DISASTER RESILIENCE			
LONG TERM OUTCOMES (LTO)			
1. Sustainable Management and Development of Natural Resources and Environment Improved	2. More Sustainable and Resilient Built Environment	3. Climate Change and Disaster Risk Management mainstreamed in all sectors	4. Effective enabling environment
END OF SECTOR PLAN OUTCOMES (ESPO)			
1.1 Sustainable management and development of water resources improved	2.1 Sustainable management of solid waste improved	3.1 Integration of climate change across all sectors improved	4.1 Sector governance and cross-sectoral coordination strengthened
1.2 Sustainable management and development of forests improved	2.2 Sound management of chemicals and hazardous waste improved	3.2 Public leadership, coordination, development and implementation of activities for disaster risk management improved	
1.3a Sustainable management and development of lands improved	2.3 Management of wastewater improved	3.3 Meteorological, atmospheric and geo-scientific information and data improved	
1.3b Spatial information and technical services to support sustainable land developments improved	2.4 Low carbon developments through energy efficiency and renewable energy improved		
1.4 Protection and conservation of terrestrial biological diversity strengthened	2.5 Sustainable development planning and environmental monitoring improved		
1.5 Sustainable management and development of oceans improved			

3.1 Sustainable Management and Development of Natural Resources and Environment Improved

3.1.1 Sustainable Management and Development of Water Resources Improved

The Sector, in close collaboration with the Water and Sanitation Sector, will continue to prioritise efforts to enhance the sustainability of Samoa's water resources through ongoing rehabilitation of degraded watershed areas in partnership with communities; protection of critical riparian zones from unsustainable socio-economic developments; and regulation of water abstraction activities.

The National Hydrometric Network will continue to be upgraded and expanded with the installation of new telemetry stations to improve availability and accessibility to real time data. This will also include operation and maintenance of the current network.

Efforts to rationalize the policy and legislative framework for the sustainable management of water resources to improve its consistency and responsiveness continue. Additional resources will be directed to implement the Integrated Water Management Plan for the Apia Catchment which will include flood management works. Formulation of the National Water Resources Management Plan to update the Water Resources Master Plan 1995 and the National Water Resources Management Strategy 2007-2017 will also be undertaken.

3.1.2 Sustainable Management and Development of Forests Improved

The 2 Million Tree Planting Campaign, now in its 3rd year of implementation, will continue to be promoted through targeted reforestation programs in identified critical areas. Improved management of Samoa's wetlands and National Parks through strengthened planning, monitoring and enforcement will continue to be prioritised. This will require stronger efforts to enforce the Forest Management Act to further the effective management of national parks, wetlands and monitoring of forest developments such as logging.

Samoa's Protected Area Network will be expanded, while facilitation of its legal status continues, on a case by case basis, due to contentious land ownership issues. Sustainable and alternative agricultural methods that are environmentally friendly will be promoted such as agro-forestry and organic farming in close collaboration with key stakeholders, and farmers in particular.

Potential areas for forest research and development opportunities will be explored through pilots and replicated where feasible and cost effective. Forest assessments such as audits and surveys (e.g. BIORAP) in conjunction with key implementing focal points will be carried out. Key forest indicators will be monitored consistently to update baselines, trends and status of upland and lowland habitats.

3.1.3 Sustainable Management and Development of Lands Improved

A considerable amount of the work required to achieve this outcome is drawn from the United Nations Convention to Combat Desertification (UNCCD) Aligned National Action Plan. This will include improvements to living conditions of priority affected populations; conditions and productivity of agricultural lands and key biodiversity areas; and protection and conservation of indigenous species and ecosystems of global value in Samoa. Securing financial resources for the effective implementation of the UNCCD NAP is a priority, to enable key activities such as: increased awareness and education programs on Land Degradation and Drought (LDD) issues in Samoa; strengthening of the enabling environment, as well as increasing scientific and technical knowledge, capacity building, financing and technology transfer. This will include the review of the land use policy, and drafting of the legislative framework for land management and development.

Improvements to spatial information and data to support sustainable land developments will be facilitated through increased institutional capacity building initiatives. This will include a complete upgrade of facilities and equipments such as computers, servers, required hardware and software programs, staff training to augment capacity of the Sector in spatial planning and information involving surveying and mapping services. Targeted capacity building projects are urgently needed to address identified capacity needs.

3.1.4 Protection and Conservation of Terrestrial Biological Diversity Improved

Conservation and sustainable management of biological diversity will continue to receive priority action. The National Biodiversity Strategy and Action Plan 2015 – 2020 (NBSAP) which translates Samoa's commitments under the Aichi Targets into national targets has been integrated into the NESP. This includes among others improvements to the planning, policy and legislative framework for the conservation and sustainable management of biological resources (marine and terrestrial) in targeted Key Biodiversity Areas (KBAs), and the expansion and legalization of the Protected Area Network in close collaboration with other implementing focal points such as the Forestry Division. Rehabilitation and restoration of critical ecosystems including concerted efforts to promote recovery of threatened species will be implemented.

Efforts towards the management of invasive species within critical ecosystems as well as close monitoring of their status and impacts will continue to increase. Research and training (scientific and technical) will be promoted and supported to enhance the sustainable use and management of Samoa's key biodiversity areas.

Economic developments will be screened through EIAs in close collaboration with PUMA. Coordinated public education and awareness programs on sustainable management of forests, water resources and land will be encouraged and supported to ensure an integrated ecosystem wide approach.

3.1.5 Sustainable management and development of oceans improved

Improvements to the sustainable management and development of oceans will take on a much more integrated approach to coastal management, inshore and offshore fisheries management involving a diverse range of stakeholders both in government, private sector, NGOs and communities. Improvements to catchment management will lessen the pressure on the ocean and its marine resources by reducing sedimentation loads, waste (plastics and aluminum cans), nutrients (from effluent discharge) etc from contaminating the marine environment. The implementation of CIM plans currently under review will significantly increase efforts to improve sustainable management and development of oceans at the community level.

The regulatory framework for marine wildlife will be revised. To step up efforts in the conservation and protection of mangroves, a legislative framework is proposed to be developed. Response plans will be developed to manage cetacean stranding incidents, coral bleaching and crown of thorns while management plans will be developed for marine species including sharks and turtles. A national marine sanctuary framework will be developed while existing management plans will be revised and updated.

Targets on sustainable management of fisheries will be achieved through the Agriculture Sector Plan 2012 - 2016. The priorities as identified by the Agriculture Sector are integrated into the NESP to form a consolidated Oceans Management and Development framework that includes coastal management, marine conservation, fisheries and ocean health monitoring.

A designated activity on oceans monitoring has been included to address the paucity of information and data. This is fundamental to establishing trends on the health and status of the oceans, which will over time reveal the impact of land based interventions and marine conservation programs and not to mention, the impacts of climate change, ocean acidification and so forth. It is anticipated that as capacity improves the scope of the monitoring network will also increase. But for the moment, the priority is to strengthen existing monitoring efforts and gradually build up to a fully fledged well resourced monitoring program over time.

3.2 More sustainable and resilient built environment

3.2.1 Sustainable management of solid waste improved

A key aspect of sustainable production and consumption patterns is solid waste management. Improvements to solid waste management will target firstly the review and update of the existing framework. This includes an update of the National Waste Management Strategy and finalization and implementation of the Waste Minimization Strategy. Implementation of the Container Deposit Levy and strengthening partnership with the private sector on potential recycling investments will continue to be prioritised.

Improved performance in the provision of waste management services through improved procurement, and contract management remains a key priority, particularly in the areas of monitoring and enforcement. There are plans to improve the Tafaigata Landfill to enhance the current capacity and lifespan of the landfill to accommodate increasing volumes of waste generated. Concerted efforts to segregate waste at the household and commercial level will continue to increase the lifespan of the existing landfills. In addition, there will be plans to construct a new landfill for Savaii within this NESP period. Adverse environmental impacts from existing landfills will continue to be closely monitored.

Institutional strengthening for waste management is urgently needed. Presently, the staff base is far from sufficient and includes one principal level position, one senior, one officer and six landfill assistants. To significantly increase the capacity of MNRE to address solid waste management appropriately, more resources will need to be allocated towards waste management. The PSC following its functional analysis has recommended the establishment of a specialised waste management unit. The Sector is therefore proposing to recruit an assistant CEO and other senior level positions dedicated to improving solid waste management in Samoa.

3.2.2 Sound management of chemicals and hazardous waste improved

Considerable efforts are required to ensure sound management of chemicals and hazardous waste. This will require increased awareness and education programs to elevate issues around the safe management of highly toxic wastes.

Concerted efforts will go towards strengthening of the existing policy and legislative framework, implementation of the National Chemical and Hazardous Waste Management Policy and recommendations from the National Chemical Profile (NCP). This will include improvements to accuracy and consistency of chemical trade information through improved infrastructures and systems to track chemical importation use, storage and disposal.

There are a number of agencies with overlapping mandates concerning chemical management, as such stronger efforts to encourage coordination of regulatory functions and responsibilities between the MNRE,

MOF, Ministry of Health (MoH), Ministry of Agriculture and Fisheries (MAF) and Ministry of Education Sports and Culture (MESC) will continue. Systematic monitoring and assessment of health and environmental impacts will also be undertaken.

3.2.3 Management of wastewater improved

The Environment Sector in close collaboration with the Water and Sanitation Sector, Health Sector and the Building Sector will work towards improving the sustainable management of wastewater systems in Samoa. This will involve improved coordination of regulatory functions and responsibilities in relation to monitoring and enforcement of approved standards as set out in the Memorandum Of Understanding (MOU) between MNRE, Ministry of Works Transport and Infrastructure (MWTI) and MOH. As well, streamlined reporting and sharing of resources including information/data, finances and technical expertise critical to achieving mutual goals in the sanitation agenda will be encouraged.

Finalisation of the new and improved National Building Code and National Effluent Standards for Samoa will see a stronger performance in terms of monitoring and enforcement through joint efforts between MWTI, MOH and MNRE. The draft National Sanitation Policy will also be revisited and finalised for cabinet approval.

3.2.4 Low carbon developments through energy efficiency and renewable energy improved

The Sector will continue to strengthen its collaboration and partnership with the Energy, Transport and Building Sectors to reduce greenhouse gas (GHG) emissions in Samoa through low carbon developments.

This will involve at the outset, strengthening of the enabling environment by updating the national policy framework on energy to respond to current and emerging issues, and ensuring that the required support to facilitate the implementation of the said framework is available. In this regard, the soon to be launched Energy Sector Plan (ESP) 2017-2022 has been updated to underpin initiatives consolidated through extensive consultations with the community and stakeholders, collective efforts that are progressing under the National Greenhouse Gas Abatement Strategy 2008–2018, as well as the development and implementation of Samoa's Intended Nationally Determined Contributions (INDC) and Nationally Appropriate Mitigation Actions (NAMA) which are key tools to achieving Samoa's low carbon development goals.

The electricity sector in close collaboration with the environment sector will work together to achieve Samoa's INDC which aims to generate 100% of electricity from renewable energy sources by 2025. The transport sector on the other hand through the NAMA will endeavor to gradually switch from normal fossilized transport to 100% renewable electricity transport mediums. While the building and refrigeration sectors will enhance their efforts to comply with the National Building Code and the Energy Efficiency Bill by promoting the use of energy efficient products.

Collaboration between MNRE, MWTI, LTA, EPC, OOTR, STEC, SROS and the Refrigeration Association of Samoa as well as other key partners will continue to be strengthened. The role of the National Energy Coordination Committee (NECC) to provide overall leadership and oversight is maintained, while streamlined monitoring and reporting between the different sectors will be promoted for improved cross-sectoral coordination.

The Sector will also work closely with the Energy Sector to promote energy efficient buildings and the use of renewable energy alternatives at the household level as part of Samoa's low carbon development strategies.

3.2.5 Sustainable development planning and environmental monitoring improved

The Sector will continue to ensure environmental safeguards are in place to actively screen socio-economic developments including infrastructural and environmental interventions.

Capacities of focal points will continue to be strengthened to monitor and enforce the substantive policy and legislative framework in place, including the development of necessary plans, policies, and guidelines to guide and regulate all developments. The development and implementation of CIM Plans will continue to be prioritised for all districts to strengthen community resilience to impacts of climate change. Furthermore, monitoring and compliance will be strengthened and coordinated, with relevant agencies particularly through the EIA process. Urban development will continue to be managed under the National Urban Policy, Apia City Spatial Plan and the Integrated Water Management Plan for the Greater Apia Area.

Integration of population dynamics into planning processes will be strengthened. One of the major driving forces behind environmental degradation is population growth and development as a result of unsustainable anthropogenic activities and unsustainable consumption patterns. The key areas of concern relate to land use planning and the required infrastructural developments to accommodate increasing socio-economic needs of the growing population, such as housing, access to services (water, sanitation, waste, energy etc.) and construction of hazard risk reduction measures (seawalls, river walls etc.). It will also require concerted efforts to build environmental management capacity of communities to enhance climate and disaster resilience.

MNRE through its development consent process will support the implementation of the national building code. The MWTI and MNRE through the development consent process will continue to work closely to ensure environmental safeguards are addressed in construction works. Coordinated compliance monitoring and reporting will continue to be encouraged and supported.

3.3 Climate Change and Disaster Risk Management Mainstreamed in all sectors

3.3.1 Integration of climate change across all sectors enhanced

Climate Change is widely accepted as a developmental issue that cuts across socio-economic and environmental agendas. Efforts to achieve sustainable development are therefore predisposed to Samoa's vulnerability and ability to adapt to and mitigate impacts of climate change.

The Government in response, has made Climate Change a 'priority policy determinant for Samoa', and as a result, the Sector will be working towards strengthening the policy and legislative framework for Climate Change adaptation. This will include the update of the National Climate Change Policy, the finalization of the Climate Change Bill and development of a National Climate Strategy and Climate Change Adaptation Plan. The development of Samoa's Third National Communication Report to the UNFCCC will also be undertaken.

Institutional arrangements for Climate Change are likely to change within this NESP period as Government moves to strengthen and consolidate national efforts to addressing climate change issues. This could see a reshuffle of institutional roles and functions and the establishment of new government agencies within the sector. At present, the MNRE is the technical focal point for Samoa's national climate change agenda. Coordination mechanisms and dialogue on climate change adaptation issues will continue to be strengthened through existing forums with key government agencies, the private sector, NGOs, and communities including development partners.

Given that 70% of the country's population and infrastructure are located in the low lying coastal areas, building the resilience of coastal communities will continue to be prioritised. This will be achieved through the implementation of CIM Plans nationwide, in addition to community based climate change adaptation initiatives, which will be supported and implemented in close partnership under the Global Environment Facility (GEF) Small Grants Programme and the Civil Society Support Programme (CSSP).

3.3.2 Public leadership, coordination, development and implementation of activities for disaster risk management improved

The Disaster Advisory Council (DAC), under the chairmanship of the Honourable Prime Minister, provides oversight of the overall disaster risk management programme through its monitoring role in the implementation of the National Disaster Management Plan (NDMP), which has been updated to 2016 - 2019. Mainstreaming of DRM across all sectors is imperative to achieving climate and disaster resilience overall. Stronger collaborations and networks between MNRE and other government ministries and agencies, the private sector, civil societies/NGOs and communities will continue to be prioritised. This will include continuation of ongoing awareness and educational programs including national simulation exercises and drills targeting schools, communities, the public and private sectors and NGOs.

Institutional capacity of MNRE to coordinate national response will be strengthened with the construction of a fully equipped and resourced NEOC. The scheduled review of the Disaster Management Act 2007 will further improve national preparedness, response and risk management functions, roles and responsibilities of MNRE and key partners. Community risk management will continue to be strengthened through the continuing implementation of CDCRM and Riskscape projects. Warning systems will continue to be tested and maintained while evacuation centres will be assessed regularly to ensure they are structurally safe with adequate facilities in place. High risk areas will be identified for the public's information and safety while specific risk assessments for highly vulnerable areas like Mt. Vaea will be undertaken. In addition, a comprehensive study of the Savaii volcanic eruption will also be undertaken.

Capacity building needs identified by IAs and stakeholders/communities will be addressed at the sector level during 'peacetimes'. This will include targeted trainings such as post disaster and needs assessment (PDNA) for specific sectors, gender - sensitive disaster preparedness and response arrangements and plans for communities, and equally important, the specific needs of vulnerable groups. Public private partnerships will be strengthened through knowledge sharing and innovative solutions to enhance disaster preparedness, response and recovery efforts.

3.3.3 Meteorological, atmospheric and geo-scientific information and data improved

Improvements to the existing policy and legislative framework will include development of the national atmospheric and deep sea policies, the drafting of a Meteorology Bill and review of the Ozone Layer Regulations 2006.

Quality and accuracy of weather services, climate information and data will continue to be improved. This includes ongoing maintenance of weather stations and forecasting systems, including rainfall and climate network systems, and documentation of traditional knowledge on climate predictions. Provision of timely and accurate weather and tide information, as well as seasonal outlooks in relation to climate, rainfall and temperature will continue to be prioritised.

Efforts to control and reduce the use of ozone depleting substances, will be elevated with the establishment of a fully functional Air Quality Monitoring Unit, which will expand its scope to include an air quality monitoring program.

Data from geo-scientific observations and investigations will be collected through continuing geo-hazard and geotechnical investigation works and from geomagnetism observations. This will require an upgrade of the geological laboratory, development of safety operations standards manual, and a geo-science hazard response plan. In addition, timely and accurate earthquake and tsunami warning services will continue to be provided to the public.

3.4 Effective enabling environment

3.4.1 Sector governance and cross-sectoral coordination strengthened

The Sector will strive to have a robust sector policy and legislative framework in place. Implementation of policies and enforcement of the sector's legislated roles and functions will continue to receive priority focus and action. A number of existing policy frameworks will be reviewed and updated including formulation of new policies and legislative frameworks across the sector.

An institutional mapping of IA capacities will be conducted to identify critical capacity constraints at the policy, technical and administrative level, to facilitate implementation of the NESP. The Sector will pursue cost effective, innovative and sustainable solutions to address identified capacity constraints. This will primarily involve sharing of information, access to data, exchange of technical expertise and pooling of resources (including financial) for local in-country training programs and MOUs with tertiary education providers to facilitate technical science based trainings where relevant and available. Learning exchanges between agencies will be encouraged and supported. Similarly partnerships with regional and international communities to build national and local capacities to implement the NESP will continue to be actively pursued.

The Sector's Monitoring, Evaluation and Reporting Framework will continue to be strengthened and will aim to streamline sector monitoring and reporting. This will require the development of a sector information and reporting system (IRIS) to track progress and report against identified indicators. Implementation of the NESP will be monitored through quarterly meetings of the NESSC and sector annual reviews.

Information management and communication within the sector will continue to be strengthened. The implementation of the DKIF will greatly improve access to information and data through reports and studies available within the sector. A Sector Communication Strategy will be developed and implemented to improve stakeholder communication and engagement within MNRE and across the sector. Reports generated from the implementation of the NESP will be communicated to sector stakeholders and used to inform sector wide planning and budgeting. Attempts will also be made to simplify sector reporting and communication systems and information networks. This will include user friendly formats for grassroots based stakeholders in networking, training, and facilitation of media practitioners to publish and disseminate key environmental information.

Implementation Arrangements



4. Implementation Arrangements

4.1 Institutional Arrangements - Our Implementing Partners

The sector is made up of a diverse range of IAs, whose roles and responsibilities, have been mapped against the NESP to clearly identify their contribution(s) in the realization of the sector's overarching goal. The Sector Institutional Map illustrated in Figure 07 identifies five groups of IAs; public sector agencies including state owned enterprises, private sector, academic institutions, non-governmental organizations and small grants programmes.

4.1.1 Public Sector Agencies - Government Ministries and State Owned Enterprises.

<i>Ministry of Natural Resources and Environment (MNRE)</i>	
1. Role	Policy maker, Regulator, Land Registrar, Sector Coordinator and Lead Implementing Agency for the Water and Sanitation Sector and the Environment Sector
2. Responsible	Sustainable management and development of Samoa's natural resources, environment conservation and protection, sustainability of the built environment, technical focal point for climate change and disaster risk management.
3. Specific Sector Role	Sustainable management and development of Samoa's natural resources such as forests, freshwater (surface and groundwater), land ² , coastal, ocean, and biological resources (terrestrial and marine biodiversity). In relation to the built environment ³ , the Ministry is responsible for implementing environmental safeguards through its development consent process to ensure developments do not adversely impact the environment, and that identified risks and hazards are managed and minimized. Climate Change and Disaster Risk Management are addressed as cross cutting issues with the Ministry as the technical focal point. The Ministry plays a key role in mainstreaming climate change and disaster risk management across all sectors. The MNRE is also responsible for coordination of the Environment Sector and the Water and Sanitation Sector.
<i>Ministry of Health (MOH)</i>	
1. Role	Policy Maker, Regulator, Sector Coordinator for the Health Sector, Health Registrar
2. Responsible	The MOH has a statutory responsibility to advise MNRE on matters associated with the management and disposal of health care wastes, and has worked in conjunction with MNRE and other stakeholders, in the development of the health care waste management plan. <i>Health care wastes</i> are potentially hazardous wastes that are generated by public and private health care institutions, and consist of, or are contaminated by, potentially infectious substances (e.g. blood), human tissue, and/or potentially hazardous chemical substances (e.g. pharmaceuticals). Due to their biological, chemical and/or physical nature, these wastes present special hazards and other aesthetic considerations that need to be managed during their generation, classification, segregation, packaging, handling, treatment and disposal.
3. Specific Sector Role	Work closely with MNRE and key IAs to ensure integrated Health Care Waste Management.
<i>Ministry of Works, Transport and Infrastructure (MWTI)</i>	
1. Role	Policy Maker, Regulator, Sector Coordinator for the Transport (Infrastructure) Sector
2. Responsible	MWTI's mandate is to 'ensure safe, secure and viable transportation modes and infrastructure assets in Samoa'. It has responsibility over the safety and security of civil aviation operations, activities and development in Samoa; safety and security for all maritime transportation; provision of a safe, efficient and effective national road and drainage network for Samoa; coordination and implementation of the Transport Sector Plan; and ensuring Building Structures in Samoa are sustainable and safe in accordance with requirements in the National Building Code and applicable regulations and standards. The MWTI is the focal point for the National Infrastructure and Strategic Plan (NISIP) and lead implementing agency for the Transport Sector.
3. Specific Sector Role	MWTI plays a crucial role in ensuring a sustainable and resilient built environment for Samoa through the enforcement of the national building code and building permit system. As part of the national building code, the MWTI monitors and enforces septic tank standards together with the

² including land administration, registration, land lease and valuation of Government, Church, Freehold and Customary Lands.

³ This includes solid waste management, chemicals and hazardous waste, sanitation and infrastructure

	MOH and MNRE through PUMA. MWTI plays a crucial role in promoting low carbon developments through renewable energy and energy efficiency in the building and transport sectors. MWTI through its Land Transport Services is responsible for managing the drainage network which is a key component of national integrated flood management initiatives.
Ministry of Education, Sports and Culture (MESC)	
1. Role	Policy Maker, Regulator, Sector Coordinator for the Education Sector
2. Responsible	MESC is responsible for the national education system involving quality, access, relevance of education at all levels. The Ministry is also responsible for Culture and Sports developments.
3. Specific Sector Role	MESC is responsible for setting the curriculum and therefore plays a crucial role in integrating teaching and learning materials relating to environmental sustainability, climate change and disaster risk management at all levels. In addition, the MNRE works closely with MESC for the implementation of the National Heritage Policy where MESC provides oversight on cultural heritage issues and developments while MNRE is responsible for natural heritage.
Ministry of Commerce, Industries and Labor (MCIL)	
1. Role	Policy Maker, Regulator, Sector Coordinator for the Trade and Commerce Sector, Registrar for Businesses and Intellectual Property Rights.
2. Responsible	MCIL's overall goal is to foster economic growth. It is responsible for industry development, foreign investment, trade, apprenticeship scheme, employment and labor force and occupational health and safety. It is also the registrar of companies and intellectual property rights. The Ministry coordinates the Trade, Commerce and Manufacturing Sector.
3. Specific Sector Role	MCIL is taking the lead role in formalizing Green Jobs as vital employment opportunities both in the informal and formal sectors. The MCIL together with NUS and SQA are working towards developing core skills and competencies for Green Jobs in Samoa targeting the Agriculture and Environment Sectors. This will allow for recognition and inclusion of new areas such as renewable energy, energy efficiency, organic farming, agro-forestry and recycling alongside specialized vocational trainings such as carpentry, refrigeration etc.
Ministry of Women, Community and Social Development (MWCSO)	
1. Role	Policy Maker, Regulator, Sector Coordinator for the Community Sector
2. Responsible	The MWCSO is responsible for facilitating positive and sustainable social and economic development at the community level. This involves strengthening local village governance; empowering communities to take charge of their social and economic development initiatives; ensuring gender responsiveness in national planning and development frameworks to facilitate equal opportunities for all. In this respect, the Ministry works closely with the Village Council, Womens Committees, Untitled Men, Youth including Church communities. The Ministry is also the focal point for national gender mainstreaming.
3. Specific Sector Role	MWCSO plays a crucial role in facilitating effective community engagement with targeted communities through improved local governance structures in place. This will increase capacity of communities to engage and participate fully in planning and implementing sustainable development initiatives including climate change actions and disaster risk management.
Ministry of Agriculture and Fisheries (MAF)	
1. Role	Policy Maker, Regulator, Sector Coordinator for the Agriculture Sector
2. Responsible	MAF's overall goal is to 'increase food, nutrition and income security' through improvements in animal production and health; crop production (subsistence and commercial); inshore and commercial fisheries, aquaculture and quarantine. MAF is responsible for coordination of the Agriculture Sector.
3. Specific Sector Role	MAF supports the need to build climate and disaster resilience of families and communities through the development of sustainable agricultural and fisheries practices and technologies. Through its Quarantine Division, MAF is responsible for regulating the importation of agrochemicals. MAF currently chairs the National Pesticides Committee of which MNRE and MOH are members of. The Agriculture Sector's SPO 4 Working Group is chaired by MNRE.
Ministry of Foreign Affairs and Trade (MFAT)	
1. Role	Policy Maker and Regulator for Trade and Foreign Relations, Political Focal Point
2. Responsible	MFAT is responsible for managing Samoa's trade and foreign relations with the international community through bilateral and multilateral partnerships in line with Samoa's national interests. It facilitates Samoa's accession and ratification of international treaties, conventions and agreements. The Ministry manages the Scholarships and Training Program in accordance with Samoa's priority

	human resource development needs. The Diplomatic Privileges and Immunities Act 1978, the Maritime Zones Act 1999, the Chemical Weapons Prohibition Act 2011 and the Cluster Munitions Prohibition Act 2012 are administered by MFAT.
3. MFAT Specific Sector Role	MFAT is the Political Focal for all international agreements. Samoa has ratified up to 25 multilateral environmental agreements including the recent Paris Agreement on Climate Change. MFAT operates overseas diplomatic posts and missions that have been at the forefront of international negotiations relating to key MEAs such as climate change, sustainable development goals, SAMOA pathway etc. Coordination between MNRE and MFAT is important to ensure Samoa's position on key environmental, climate change and disaster risk management issues is well informed.
<i>Ministry of Finance (MOF)</i>	
1. Role	Policy Maker, Regulator, Treasurer, Sector Coordinator for the Finance Sector
2. Responsible	MOF provides policy and strategic advice, as well as financial services to the Government in order to achieve sustainable, long-term economic outcomes and fiscal viability towards the advancement of the national vision to 'achieve quality of life for all Samoan citizens'. Our role is to promote accountability and transparency in service delivery to the community through establishment and implementation of sound financial management systems, standards, policies and procedures.
3. Specific Sector Role	MOF undertakes the mobilisation and allocation of annual financial resources to all Government funded agencies through its annual budget cycles. It also houses two aid coordination units which oversee aid funding from development partners to different areas of the Sector. The Climate Resilience Investment Coordination Unit looks after climate finance and climate resilience related projects, while the Aid Division looks after all other projects across Government. The MOF provides periodic budget and economic statements as well as project appraisals from time to time. The Economic Planning and Policy Division is secretariat to the CDC and facilitates the SDS and higher level performance monitoring.
<i>Ministry of Prime Minister and Cabinet (MPMC)</i>	
1. Role	Cabinet Secretariat, National Policy Coordination, Immigration Service Provider
2. Responsible	MPMC is responsible for improved coordination and monitoring of policy development across the whole of government. It houses the Office of the Head of State (HOS), the Office of Council of Deputies and the Office of the Prime Minister. Because of this, the Ministry is also responsible for coordination of the annual Independence Day Celebrations, the Two Samoa Talks with the American Samoa Territory and Honorary Awards. MPMC is also responsible for Samoa's Immigration services including the administration of the overseas seasonal workers program.
3. Specific Sector Role	MPMC is a key Implementing Agency of the Sector given its secretariat role to Cabinet and coordination of national policy decisions across the whole of government.
<i>Office of the Attorney General (OAG)</i>	
1. Role	Legal Adviser to the Head of State, the Prime Minister and Cabinet; Protector of the Judiciary; Common law protector of charitable trusts and Legislative Drafter.
2. Responsible	The OAG is responsible for providing professional legal opinions to all Government Ministries and SOEs including legislative drafting; civil proceedings involving Government; criminal proceedings etc.
3. Specific Sector Role	Governance - legislative drafting, review and endorsement of Sector related bills for Cabinet approval before they are tabled before Parliament. OAG plays a key role in the implementation of the legislative / regulatory framework in relation to law enforcement and prosecution. OAG is a member of the Tenders Board and provides legal advice on all of Government tender proceedings including tender evaluations.
<i>Public Service Commission (PSC)</i>	
1. Role	Public Sector Administrator, Human Resource Manager
2. Responsible	The PSC is responsible for the administration of the public service and its human resource. This involves Human Resource Planning and Development; Improvements to Public Service Delivery, Integrity and Culture.
3. PSC Specific Sector Role	Human resource development - PSC plays a crucial role in advancing public sector agencies or government ministries capacity development, morale, integrity and culture. Facilitation of targeted trainings to improve the quality and integrity of managing and the administration of Public Offices is crucial to improving the performance and morale of public officials in the implementation of duties. PSC is responsible for recruitment and selection public servants include project based staff.

Ministry of Communication and Information Technology (MCIT)

1. Role	Policy Maker, National Broadcaster, Postal Service Provider, ICT Secretariat
2. Responsible	MCIT is responsible for developing and administering national communication and IT policies and regulation of service providers in close collaboration with the Office of the Regulator.
3. Specific Sector Role	MCIT is responsible for the National Radio 2AP which is the Voice of the Nation. It is one of the most reliable sources of information for emergency warnings before, during and after a natural disaster. Its wide spread coverage of the islands makes it a most reliable mode of communication to promote environmental awareness programs including key socio-economic developments, live coverage of national events etc. MCIT through its ICT policies play a key role in managing e-waste targeting sources, collection, handling and recycling of electronic and electrical waste. Government institutions and private sector are the biggest generators of e-waste.##

Samoa Tourism Authority (STA)

1. Role	Public Beneficial Body. Sector Coordinator for the Tourism Sector
2. Responsible	Responsible for tourism policy and planning, research and development and tourism marketing.
3. Specific Sector Role	STA promotes sustainable tourism through eco-tourism developments in close collaboration with the MNRE. STA is also working closely with MNRE under its Apia Waterfront Development Project and Climate Change Project. STA also plays a key role in the Sanitation subsector through the promotion of environmentally friendly garden toilets.

Scientific Research Organization of Samoa (SROS)

1. Role	Independent Public Beneficial Body, Scientific Researcher
2. Responsible	Established to produce value added goods and services for export and reduce dependence on fossil fuel and through the use of alternative renewable energy sources. Its mission is 'to conduct scientific research and develop technologies of great value in the sustainable development of value added goods and services for export, and achieve reduction in fuel imports and Green House Gases.
3. Specific Sector Role	SROS' work on renewable energy supports the Sector's low carbon development initiative through the MNRE. The SROS' work focuses on 'to increase use of sustainable energy' and 2.2 which will involve research on terrestrial plants and marine organisms to develop local medicinal and cosmetic products.

Samoa Trust Estate Corporation (STEC)

1. Role	Public Body (State Owned Enterprise), Trustee, Investor
2. Responsible⁴	STEC's main goal is to become a 'profitable and successful commercial entity'. It hopes to achieve this through property investment and development as well as becoming the first private provider of renewable energy and leading producer of value adding primary products in Samoa.
3. Specific Sector Role	STEC will play a key role in piloting renewable energy technologies and towards the 2 Million Tree Campaign through the extensive planting of cocoa and coconut.

Electric Power Corporation (EPC)⁵

1. Role	Autonomous State owned enterprise (SOE) or Public Body. Electricity producer and supplier (imported petroleum and hydropower-generated electricity).
2. Responsible	EPC is responsible for generation, transmission, distribution and selling of electricity in Samoa. Its immediate vision is to provide “clean energy sources for sustainable and affordable electricity supply for Samoa”. It recently went through a major transformation in its organizational structure since 2014. Following the deregulation of the electricity industry and with it the shift to sustainable electricity, EPC is promoting the use of renewable energy sources from feasible alternatives to drastically reduce the use of and ultimately remove reliance on imported fossil fuel and the issue of fluctuating oil prices. Sustainability of water resources is identified as a crucial issue that will significant implications on its capacity for hydropower generation and sustainability.
3. EPC Specific Sector Role	EPC plays a major role as an importer of fossil fuel for electricity and a user of water resources for hydro-power generation. Key objectives that contribute directly to the NESP are: <i>a) To produce electricity from 100% Renewable Energy sources by 2025⁶,</i> <i>b) To provide a reliable and sustainable electricity supply coverage to 100% of households at minimal costs,</i> #

⁴ STEC Quarterly Report 2017

⁵ EPC Corporate Plan 2017 - 2020

⁶ Note target has been revised from 2017 to 2025.

<i>Samoa Bureau of Statistics (SBS)</i>	
1. Role	Leader and Coordinator of all National Statistics
2. Responsible	The Bureau is responsible for providing statistics to develop and monitor policies at the national level and provision of crucial statistics with which to meet regional and international reporting requirements through MEAs ratified by Samoa.
3. SBS Specific Sector Role	The SBS identifies five long term goals for the development of statistics in Samoa. Goals 2 & 3 contribute directly to the work of the Sector. This includes the provision of population and demographic statistics, population and housing census; disability survey and demographic health survey as well as socio-economic and environmental statistics. This includes sector statistics for infrastructure, transport, labor, education, health, judicial, poverty and hardship, agriculture and fishing, tourism and environmental. In addition, SBS is the national focal point for monitoring and reporting the Sustainable Development Goals and has been working closely with the Sector on localization of the goals.
<i>Land Transport Authority (LTA)</i>	
1. Role	State Owned Enterprise, semi-autonomous. Provider of road asset management including road and drainage maintenance.
2. Responsible	LTA's prime objective is to provide a safe and environmentally friendly land transportation network for Samoa. This is through the provision of quality road networks and infrastructure, as well as maintain updated road safety requirements through periodic license reviews for drivers and registrations for vehicles.
3. Specific Sector Role	LTA manages projects which aim to climate proof land transport infrastructures such as bridges, roads etc. It is a key partner in identifying key transport infrastructures/networks which require climate proofing to enhance community resilience in times of disasters and climate impacts. In addition, the Transport Sector endeavors to promote renewable fueled motorized vehicles.
<i>Samoa Water Authority (SWA)</i>	
1. Role	State Owned Enterprise, Semi-autonomous, water service provider including wastewater for commercial properties in the CBD area.
2. Responsible	SWA provides water services to approximately 80% of Samoa's total population within its defined service areas and wastewater services for commercial businesses in the CBD area. It is one of two service providers. The other being the Independent Water Schemes Association (IWSA), responsible for delivering water services to 17% of the population. The remaining 3% relies on rainwater harvesting for their water needs.
3. Specific Sector Role	SWA identifies Integrated Water Management as one of the five key objectives it needs to achieve to improve its overall performance in the medium term. This involves promotion of water conservation measures and increased resilience to climate change impacts by climate proofing its water supply network and water treatment designs and operations. SWA (water treatment plants and reticulated network) works closely with MNRE (watershed management) and MOH (drinking water quality monitoring) in the development and implementation of Water Safety Plans to facilitate improvements to drinking water quality. SWA's water abstraction activities particularly from ground water sources or aquifers are being monitored closely under MNRE's Water Abstraction Licensing Scheme.
<i>Samoa Fire and Emergency Services Authority (FESA)</i>	
1. Role	Public Beneficial Body. Emergency response and risk reduction.
2. Responsible	Committed to the provision of best emergency response prevention advise and services.
3. Specific Sector Role	FESA is one of the key players in disaster response and disaster risk reduction, especially in terms of fire safety advise. It is a main stakeholder in the Disaster Advisory Council and key implementing agency of the Forest Fire Strategy. The authority was established to undertake the prevention, suppression and control of fires and other emergencies nationwide, in collaboration with DMO, Ministry of Police, MOH, Meteorology Division, Red Cross and others. FESA is a key agency in any natural disaster as they are first responders to the safety and wellbeing of the community.

4.1.2 Private Sector

<i>Chamber of Commerce (CoC)</i>	
1. Role	Private Sector Advocacy, Networking
2. Responsible	The Chamber is the Umbrella Organisation for the business community. It advocates and represents the unified voice and common interests of the private sector to the government. It is responsible for building the capacity of the private sector and networking amongst its members.
3. Specific Sector Role	Represents the Private Sector interests in sector planning and developments. Public Private Partnerships - the Chamber will work closely with the Sector to promote opportunities for PPP in line with Government PPP manual.

4.1.3 Academic Institutions

<i>National University of Samoa (NUS)</i>	
1. Role	Academic Institution, Researcher
2. Responsible	The NUS plays a crucial role in the Sector by providing tertiary level qualifications and skills in the workforce through its undergraduate and postgraduate science programs and research on issues to inform and identify national development priorities and / or gaps.
3. Specific Sector Role	Research - The Faculty of Science is actively involved in various energy, water and climate change research / projects with outcomes that will contribute to the realisation of the Sector's goal: • Feasibility study on Wind energy in Samoa; • Promoting Energy Efficiency Project 2 (PEEP2); • Vocational Training and Education for Clean Energy (VOCTEC) project; • HPH332 Biofuel student experiment using coconut oil; • Feasibility Study for a Sustainable Campus Using Solar PV Renewable Energy Technology: A Case Study at the National University of Samoa; • Monitoring and Assessing the quality and safety of our Water Resources through stream profiling - Collaboration with MNRE • Cataloguing Chemicals in a Typical IWS Catchment - Collaboration with MNRE • NUS has a Dark Friday policy to save energy.
<i>University of the South Pacific (USP)</i>	
1. Role	Academic Institution, Researcher
2. Responsible	USP offers extensive undergraduate and postgraduate programs including Masters and PhD in Climate Change that will enhance technical qualifications, skills needed in the Sector. It also has an extensive research program and laboratory services for natural resources management; drugs analysis and testing; and quality control. The South Pacific Regional Herbarium, the only one of its kind in the Pacific is set up under the USP. The USP Alafua Campus offers Agriculture undergraduate and postgraduate face to face and DFL programmes, for all schools including Faculty of Arts, Law and Education; and Faculty of Science, Technology and Environment.
3. Specific Sector Role	Research - USP undertakes research on climate change, persistent organic pollutants, environment impact assessments, renewable energy, biodiversity and conservation. The USP is also implementing regional projects on capacity building for Pacific Island Countries including Samoa. It has a Pacific Centre for Environment and Sustainable Development (PACE-SD) based in Suva and manages regional in-country projects on key areas such as climate change, renewable energy, related research/policy formulation, capacity building, loss and damage etc.

4.1.4 Non-Governmental Organizations (NGOs)

<i>Samoa Umbrella for Non-Governmental Organizations (SUNGO)</i>	
1. Role	Non-Governmental Organization, Advocacy
2. Responsible	SUNGO provides information, programs, opportunities and advocacy for civil society in Samoa. It is the umbrella organization for all NGOs in Samoa and represents the unified voice and common interests of NGOs to the Government. SUNGO's programs are centered on governance; advocacy; green jobs; members engagement and partnership. It seeks to ensure NGOs role and responsibilities are integrated into government plan of actions and SDS; represent voice of NGOs in various government committees and is also responsible for building capacity of its member NGOs.
3. Specific Sector Role	SUNGO works closely with the Sector to ensure NGOs capacities are built and enhanced to act as the interface between government and local communities in the planning, implementation and monitoring of national policies and priorities.

<i>Independent Water Schemes Association (IWSA)</i>	
1. Role	Non-governmental Organization, water service provider to community schemes not part of the SWA water supply network
2. Responsible	Established in 2007, the IWSA provides capacity building and financial assistance to Independent Water Schemes (17% of Samoa's population) for improvement to their systems for good quality water. IWSA has 32 members and has been a member of SUNGO since 2011.
3. Specific Sector Role	The IWSA promotes sustainable water resources and watershed management in communities as a means to safeguard water quality and water sources. Priority of the Sector to protect catchments sourcing IWSs is associated to improving water quality as these schemes deliver raw untreated water to communities.
<i>O le Siosiomaga Society Inc. (OLSSI)</i>	
1. Role	Non-governmental Organization, NGO Advocate to the Government
2. Responsible	OLSSI's goal is to pursue "Sustainable Development through Healthy Peoples, Healthy Ecosystems, and Respect for Culture Diversity". Its mission is 'to be responsive in the conservation needs of Samoan people with respect to its environment; to take proactive action in advocating on environmental issues, and to increase the awareness of Samoans on sustainable use of natural resources and environment matters, in order for them to reap the full benefits from the outcome of these efforts'. OLSSI specializes in environment, governance, advocacy, indigenous and traditional knowledge and sustainable tourism.
3. Specific Sector Role	OLSSI is involved in a number of projects including the GEF 5 Project under UNCCD; climate justice under the UNFCCC; privatization and commercialization under the UNCBD etc. Its research work on biodiversity audits including mangroves contributes significantly to advancing national efforts to conserve and protect the terrestrial and marine environments, habitats and species diversity. OLSSI work includes monitoring the state of the environment; raising awareness and disseminating information on environmental matters, conservation and advocacy with schools and churches on sustainable development issues.
<i>Samoa Red Cross Society (SRCS)</i>	
1. Role	Nonprofit Organisation, Government Auxiliary, Humanitarian services
2. Responsible	The SRCS provides humanitarian services which includes disaster preparedness and relief, first aid trainings, social welfare development programs including water and sanitation and water safety assistances. SRCS targets vulnerable households at the grassroots level.
3. Specific Sector Role	SRCS contributes to the achievement of the Sector's overall goal through its disaster preparedness and emergency relief and social welfare program.
<i>Samoa Conservation Society (SCS)</i>	
1. Role	Environmental Non-Governmental Organization
2. Responsible	SCS is 'dedicated to promoting Samoa's biological diversity and natural heritage'. It seeks to work collaboratively with the Government and its partners to raise awareness on the environment and species within. SCS also conducts educational and outreach programs for schools and youth groups. Programs are catered towards addressing issues such as invasive species, overharvesting and overexploitation, habitat degradation, pollution and climate change.
3. Specific Sector Role	SCS is currently implementing projects on Manumea conservation; Crown of thorns management and Carbon offsets to support forest restoration which will contribute significantly to achieving the national 2 million tree planting campaign. SCSs is an environmental NGO and as such all of its programs and initiatives directly contribute to the achievement of the Sector's overall goal.
<i>Matuaileoo Environment Trust Inc. (METI)</i>	
1. Role	Non-Governmental Organization, Advocacy, Research
2. Responsible	METI's primary goal is "To provide training and promote capacity building to achieve sustainable living in Samoa through self-reliance, particularly of grassroots communities.". Its development initiatives are focused around the areas of health, education, agriculture and coastal management facilitated through its various project initiatives and training programs on life skills, permaculture and healthy living. METI runs the Samoa Sleep Clinic and NCD Outreach program and other initiatives such as the: • Second-Chance Education. • Coral Gardens project for reef rehabilitation. • Virgin Coconut oil production and Soap making • Bamboo crop development • Tropical Mushroom Growing.

3. METI Specific Sector Role	METI's overall goal to achieve sustainable living in Samoa through sustainable agricultural practices; healthy living education and coastal management targeting the grassroots communities will greatly advance efforts towards achieving environmental sustainability, climate and disaster resilience. The Sector will work closely with METI to ensure its successful programs are replicated in targeted communities and up-scaled at the national level.
<i>Adventist Disaster Relief Agency (ADRA) Samoa</i>	
1. Role	Non-profit Organization, Disaster and Emergency Relief Agency, Advocacy
2. Responsible	ADRA provides humanitarian support to vulnerable communities and those affected by natural disasters. Key activities include community based development activities to improve standard of living; disaster preparations and risk reduction; and response, relief and recovery for disasters and emergency situations
3. ADRA Specific Sector Role	ADRA plays a key role in disaster risk management. It works closely with village communities through projects to improve their level of preparedness using simulations, undertake training on household kits and develop village level disaster risk management plans.
<i>Youth Climate Action Network (YCAN) of Samoa</i>	
1. Role	Youth Climate Change Non-Governmental Organization
2. Responsible	The YCAN was established so youth can address and contribute to collective local, national, regional and global efforts to tackle the potential impacts of climate change through green practices, by working closely with communities and various partners to undertake action campaigns, outreach programmes, information exchange, communications and other relevant approaches.
3. Specific Sector Role	The YCAN is currently implementing a youth climate action project, where youth are actively taking the lead in climate action within their communities. Some of the work these young people implement include the restoration and rehabilitation of ecosystems such as mangroves, coral reefs and forests through waste removal, replanting and crown of thorns starfish control to name a few. They've installed rubbish stands in many communities to help with better waste management. They also promote the use of organic gardening and farming and raise awareness on climate change and other relevant for. The YCAN implements programmes relevant to the Sector and its overall goals and creates a platform for youth to enter into the sector which lacked in previous years.
<i>Women In Business Development Incorporated (WIBDI)</i>	
1. Role	Non-Governmental Organization
2. Responsible	WIBDI is dedicated to strengthening village economies in Samoa in ways that honour indigenous tradition, use traditional and modern technology, and promote fair trade. WIBDI empowers and equips rural families to cultivate sustainable businesses such as organic farms and products that maximize farm-based resources.
3. Specific Sector Role	WIBDI provides an avenue to promote organic farming and sustainable agricultural developments in the community. WIBDI established an organic certification system to enable access to niche markets, as well as technical, social, and micro finance support structures for families. This promotes clean green agricultural practices, and good soil management systems.

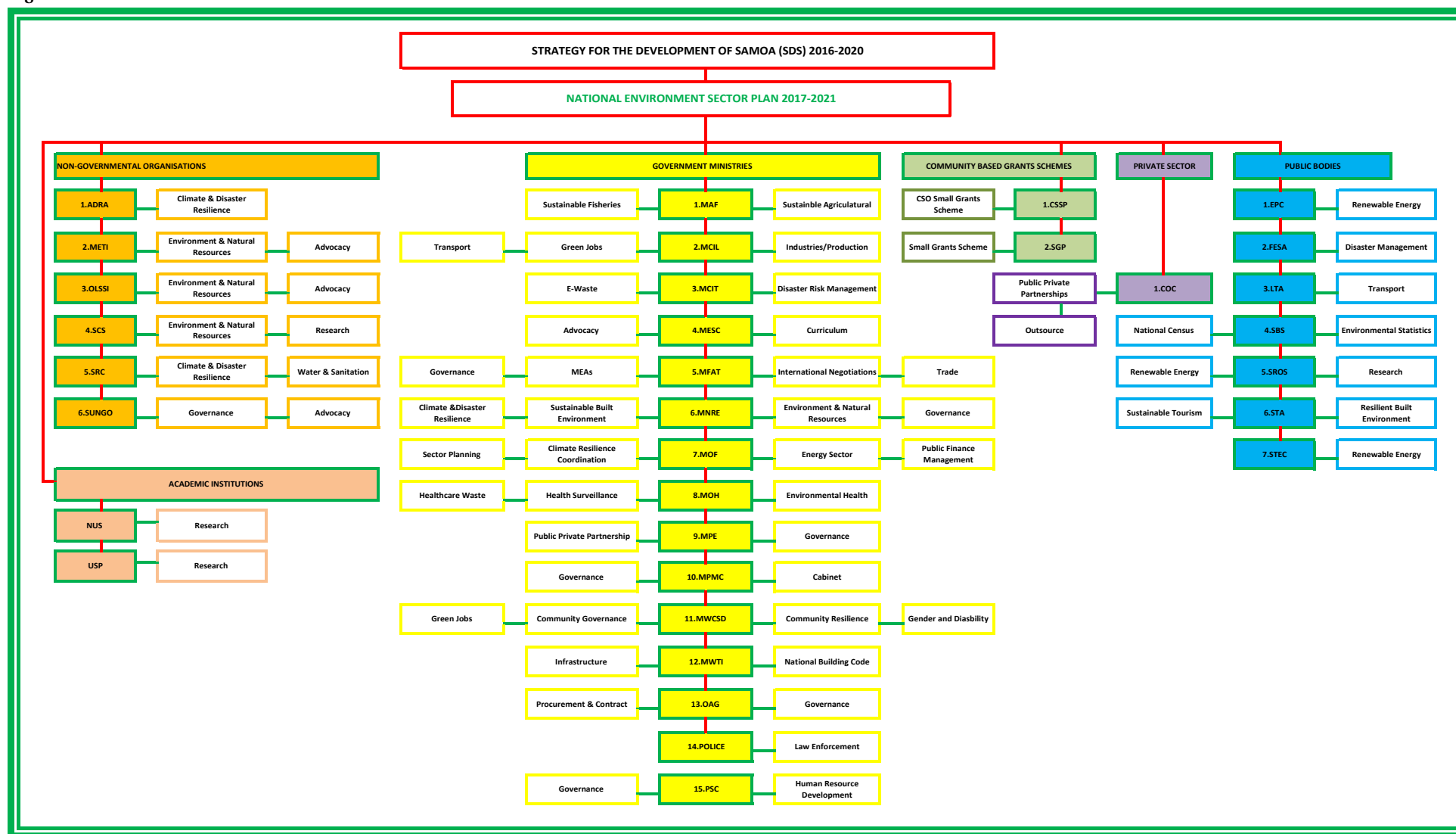
4.1.5 Small Grants Schemes

<i>Civil Society Support Programme (CSSP)</i>	
1. Role	Small Grant Scheme; Civil Society Support
2. Responsible	Civil Society Support Program (CSSP) is a harmonized small grant program funded by NZAID, DFAT and EU to address socio-economic needs of vulnerable communities/groups. The funding mechanism provides a platform to facilitate the engagement and strengthen leadership of CSOs in realizing national goals through the implementation of community based initiatives. Other key areas of the program include building the capacity of CSOs to uphold principles of good governance and advocacy to government on CSO priorities and issues to be integrated into national policies.
3. Specific Sector Role	CSSP provides a direct pathway to fully engage with CSOs at the grassroots level to strengthen integration of environmental, climate change and disaster risk management aspects of socio-economic developments funded by CSSP. Coordination between CSSP and the Sector will be crucial in ensuring socio-economic developments implemented at the grassroots level are sound, environmentally friendly and climate and disaster resilient. It will also allow for opportunities to coordinate monitoring and reporting.

Global Environmental Facility (GEF) Small Grants Programme (SGP)

1. Role	Environmental Small Grants Programme
2. Responsible	The GEF funded SGP is housed under the UNDP MCO in Samoa. It operates under its global theme of achieving sustainable development by "thinking globally and acting locally" or <i>"Global environmental benefits secured through community-based initiatives and actions"</i> . In its current OP 6 Programme, SGP maintains the focus on community and local solutions that are in line with national and global goals. Specifically the SGP Samoa Sub-regional goal is to <i>"empower our most vulnerable communities to lead their environmentally sustainable development through transformational interventions"</i> . Focal areas include international waters; Sustainable Forests & Land Degradation; Climate change Mitigation & Climate Change Adaptation; Biodiversity; and Persistent Organic Pollutants (POP).
3. Specific Sector Role	The OP6, SGP strategic initiatives will greatly advance Sector efforts to achieve environmental sustainability, climate and disaster resilience at the local level. Such initiatives will include: Landscape/Seascape Approaches; Climate-Smart Agro-Ecology Practices; Low Carbon Energy Access Co-Benefits; Local to Global Chemical Mgt Coalitions. The Sector will benefit greatly from the GEF SGP through: • Direct funding to CSOs along with capacity building in project & funds mgt. • Strengthened partnership collaboration with CSOs and communities • Strengthened community engagement • Strengthened engagement with Youth groups for green job opportunities • Improved community awareness of environmental issues and workable solutions

Figure 07: Environment Sector Institutional Framework.



4.2 Institutional Arrangements - Our Development Partners

Resource mobilisation for the implementation of identified sector programs, takes into account public funds, as well as substantial assistance from development partners. Over the years, the Sector has been able to leverage support from overseas partners for its domestic environment projects.

The Sector acknowledges the new and ongoing partnerships with the following development partners at the regional and international level:

- European Union,
- United Nations Development Programme,
- United Nations Environment Programme,
- Food and Agriculture Organisation,
- Global Environment Facility,
- The Peoples Republic of China,
- Government of Japan,
- Japan International Cooperation Agency,
- Asian Development Bank,
- World Bank,
- German Development Agency,
- United States Aid,
- Adaptation Fund,
- Green Climate Fund,
- Conservation International,
- The Australian Department of Foreign Affairs and Trade,
- New Zealand Government,
- Secretariat to the Pacific Community,
- International Union for the Conservation of Nature, and the,
- Secretariat of the Pacific Regional Environment Programme to name a few.



4.3 Sector Coordination Framework

The Sector has an extensive coordination platform consisting of several levels of committees led by various IAs. MNRE as the lead implementing agency is responsible for sector wide coordination. It looks after twelve statutory boards and two sector steering committees including subsector committees and a number of project boards and technical advisory committees charged with project management.

At the sector level, MNRE is a core member in numerous sector steering committees namely:

- the Agriculture Sector Steering Committee under MAF;
- the Trade Commerce and Manufacturing Steering Committee under MCIL;
- the National Energy Coordination Committee under MOF;
- the Climate Resilience Steering Committee under MOF;
- the Transport Sector Steering Committee under MWTI; and
- the Agriculture Sector's Working Group 4 on sustainability of natural resources and sector resilience to natural disasters and climate change also under MAF.

Figure 08, presents the overall coordination framework for the Sector, identifying existing committees and boards in line with the scope of the NESP. The key features of the sector coordination framework includes:

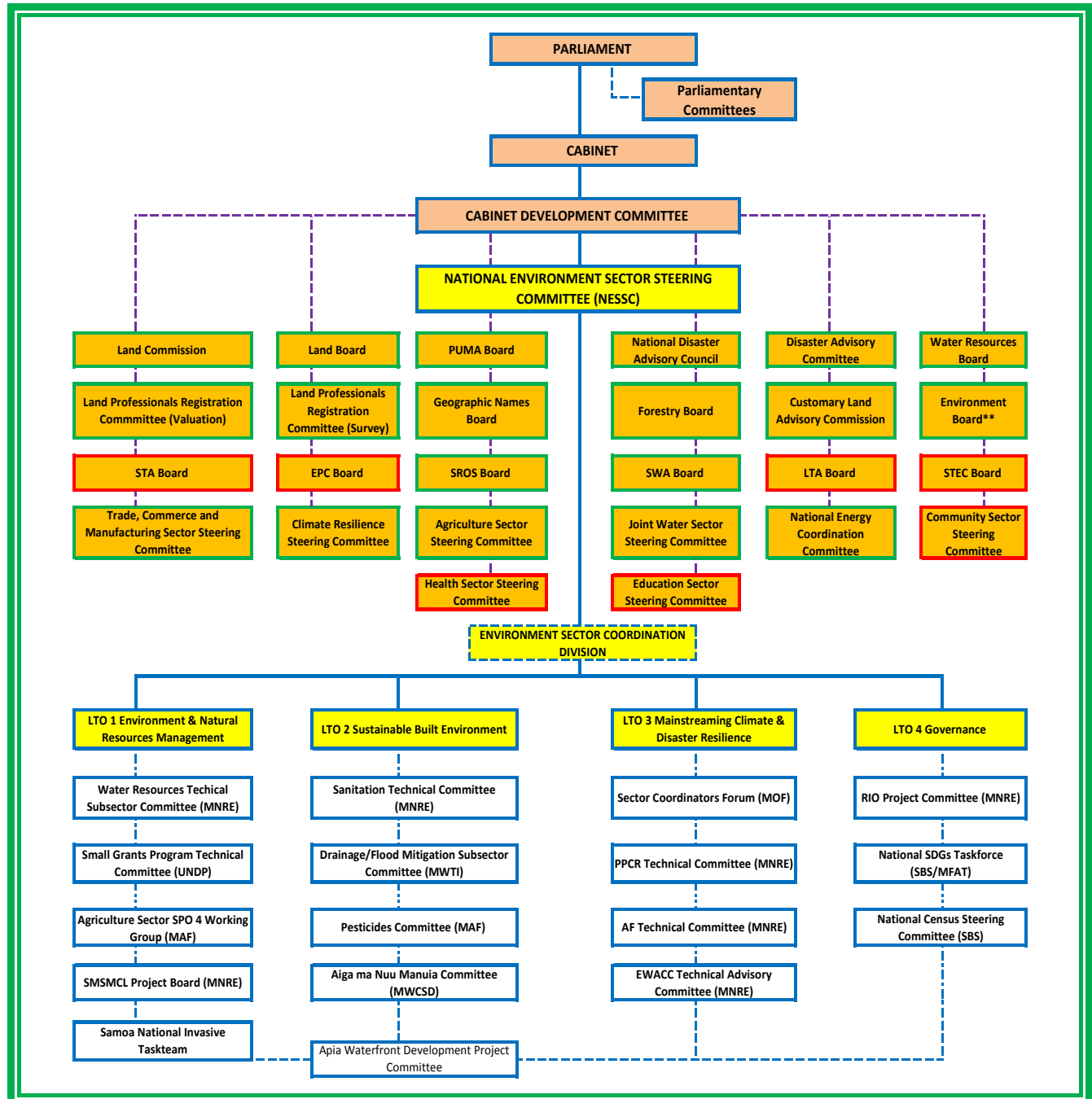
- **Parliamentary committees** - Parliamentary committees report to Parliament on the financial management and technical performance of government ministries and public bodies. All government ministries and public bodies report to parliamentary committees through ministry annual and audit reports.
- **Cabinet** - Approves national policies including bills and regulations and all national development initiatives.
- **Cabinet Development Committee (CDC)** - Chaired by the PM and attended by Chief Executive Officers (CEOs) and Assistant CEOs (ACEOs) of Government ministries and public bodies. Sector progress reports including development projects and new project proposals are tabled at CDC meetings for endorsement. The CDC also endorses policies for Cabinet approval.
- **National Environment Sector Steering Committee (NESSC)** - is the apex body for the Environment Sector, tasked with providing overall leadership and oversight of the sector wide programme. It is chaired by the CEO of MNRE with CEO of MOF as Deputy Chair. The NESSC meets on a quarterly basis. Members include representatives from the public sector, private sector, NGOs, Academic Institutions, Small Grants Programmes and Development Partners.
- **Statutory boards, Boards of Directors and other Sector Steering Committees** with linkages to the NESP are recognized and integrated into the Coordination Framework.

The MNRE, with responsibility over sector wide coordination, is represented in all of these committees / boards with the exception of those in *red outlined boxes* in Figure 04. It is important to note however, that coordination with these sectors, still exists as the government ministries and public bodies responsible for those steering committees have memberships in the NESSC.

- **Subsector Level** - Four subsectors have been established, based on the four NESP LTOs, to facilitate sector wide coordination on the implementation of the NESP.
- **Environment Sector Coordination Division** - Responsible for coordination of the sector wide programme including sector planning and monitoring and reviewing of the NESP. The Division, provides secretariat functions to the NESSC. Figure 08 illustrates the sector coordination framework

which guides, but not limited to, coordination and engagement of sector IAs. In addition, the Division will promote and make use of existing forums to facilitate cross-sectoral coordination to promote streamlined reporting.

Figure 08: Environment Sector Coordination Framework.



** Board is yet to be established. EMC Bill which establishes the Board is yet to be tabled in Parliament.

4.4 Sector Resourcing Requirements

4.4.1 The Sector Medium Term Expenditure Framework

The Sector MTEF maps out the financing needs of the Sector based on the NESP's Framework for Action 2017 - 2021. It links sector priorities and policies to the budget and integrates all streams of funding coming into the Sector, consisting of national funds and external grants. The MTEF will be reviewed annually, with the timing of the review to be aligned with the national budget cycle. The review will update actual figures based on approved annual budgets and final utilization amounts from the concluding financial year.

Sector estimates were derived from costed action plans, designed for each NESP LTO at the activity level, and from approved national budget and estimates. Financing needs of the sector include both recurrent and investment costs. Recurrent costs, constitute personnel and operational costs, as well as national policy initiatives⁷ under the local budget. Investment needs, include costs relating to infrastructural developments, capacity building and one off activities or programs funded through projects, including sector budget support. Investments are predominantly financed through external grants and sector budget support under the Water and Sanitation Sector, while recurrent costs are financed primarily by the Government.

4.4.2 Sector Financing Needs

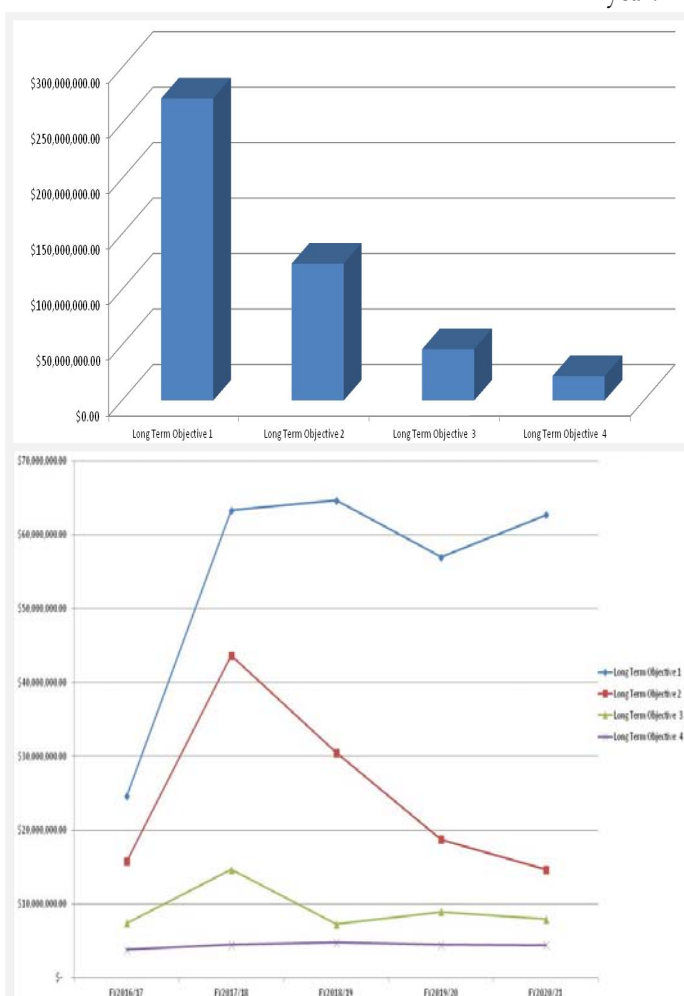
Total financing needs of the Sector, based on its updated Framework for Action 2017 - 2021, is estimated at \$467 million Tala. A summary of financing needs at the LTO level is presented in Table 07 with graphical illustration in Figure 09.

According to the Sector MTEF, investment needs are considerably higher at 73 per cent (\$339 million Tala), compared to 27 per cent (\$128 million Tala) of recurrent needs (see Table 08). LTO 1 has the highest financing needs at approximately \$273 million Tala, making up a significant 59 per cent of the sector's total financing needs, followed by LTO 2 at 26 per cent (\$123 million Tala), LTO 3 at 10 per cent (47 million Tala) and LTO 4 at 5 per cent (\$24 million Tala).

An estimated 76 per cent (\$354 million Tala) of the sector's financing needs, is secured through government funding and external grants including sector budget support (see Table 6 for list of current Sector projects). The EU Budget Support is expected to contribute, approximately \$42 million Tala, towards the realization of LTOs 1, 2 and 4.

LTO 1 makes up 63 per cent of secured funds, 22 per cent under LTO 2, 10 percent under LTO 3 and 5 per cent under LTO 4. Total shortfall of funds for the sector overall amounts to \$113 million Tala, which is 24 per

Figure 09: Summary of total financing needs for the implementation of the NESP, as per LTO and financial year.



⁷ Below the Line Items

cent of total financing needs. Of this percentage, 45 per cent (\$51 million Tala) is attributed to a shortfall in funds projected under LTO 1, 41 per cent (\$46 million Tala) under LTO 2, 11 per cent (\$12 million Tala) under LTO 3 and 3 per cent (\$4 million Tala) under LTO 4. Tables 07 and 08, provide summaries of the Sector MTEF 2017 - 2021. Detailed MTEFs for each LTO at the ESPO level are provided in section 5, as part of the NESP Operational Plan.

Table 06: Current Sector projects within the NESP Timeframe

PROJECTS	PARTNER	TOTAL FUNDS IN MILLIONS	TIMEFRAME	RESPONSIBLE
1. Enhancing Resilience of Coastal Communities to Climate Change - Adaptation Fund	GEF / UNDP	USD8.05	2013 - 2017	MNRE
2. Enhancing the resilience of tourism reliant communities to climate change risks (ICCRITS)	GEF / UNDP	USD1.95	2013 - 2017	STA
3. Integration of Climate Change Risks and Resilience into Forestry Management in Samoa (ICCRIFS)	GEF/UNDP	USD2.4	2011 - 2016	MNRE
4. Forest Protected Areas Management Project (FPAM)	GEF/FAO	USD1.4	2012 - 2016	MNRE
5. Community Sanitation Project	JAPAN / ADB	USD2.1	2013 - 2017	MNRE
6. Ozone Project (Technical cooperation)	UNEP		2014 ongoing	MNRE
7. Strengthening Multi Sectoral Management of Critical Landscapes - (SMSMCL)	GEF - SCCF	USD4.9	2014 - 2019	MNRE
8. Enhancing Climate Resilience of Coastal Communities of Samoa to Climate Change- (PPCR)	WB	USD14.6	2014 - 2018	MNRE
9. EDF10 ACP EU Building Safety and Resilience in the Pacific	EU	EUROS1.3	2014 - 2018	MNRE
10. Piu Biogas Electrification Project - (PIGGAREP)	SPREP/UNDP	USD2.4	2014 - 2017	MNRE
11. Technical Assistance to Address Climate Change - Phase 2 (TAACC2 Project)	NDRC People's Republic of China	SAT5	2014 - 2017	MNRE
12. Economy Wide Integration of Climate Change DRR/DRM to reduce Climate Vulnerability of Communities in Samoa (EWACC)	GEF / UNDP	USD14	2015 - 2020	MNRE
13. Apia Waterfront Development Project	NZMFAT	SAT1.06	2015 - 2020	MNRE, STA
14. Implementing the 3 Rio Conventions Project	GEF/UNDP	USD0.5	2015 - 2017	MNRE
15. Intended Nationally Determined Contributions - INDC	UNDP	USD.15	2015 - 2017	MNRE, EPC
16. Pacific Resilience Program (PREP)	WB	USD13.79	2016 - 2020	MNRE
17. Implementation of Disaster Risk Management in the Pacific Programme	MFAT & MCDEM Partnership	NZD1.1	2016 - 2019	MNRE, MESC
18. Pacific Risk Tool for Resilience Project	MFAT & NIWA	NZD0.65	2016 - 2019	MNRE
19. GEF6 IMPRESS Project (PIF Approved)	GEF/UNDP	USD 6.1	2017 - 2021	STEC, MNRE
20. Integrated Flood Management to Enhance Climate Resilience of the Vaisigano River Catchment in Samoa	GCF/UNDP	USD57	2017 - 2021	MOF, MNRE, MWTI, MOH, LTA
21. Strengthening human resources, legal frameworks, and institutional capacities to implement the Nagoya Protocol	GEF/UNDP	USD0.35	2017 - 2019	MNRE

Table 07: Summary of NESP Financing needs.

OVERARCHING GOAL: Enhanced environmental sustainability and Improved climate and disaster resilience	FY2016/17	FY2017/18	FY2018/19	FY2019/20	FY2020/21	TOTAL
LONG TERM OUTCOME 1 - Sustainable Management and Development of Water Resources Improved	\$24,613,584.20	\$63,395,186.20	\$64,742,164.20	\$57,068,759.20	\$62,787,121.70	\$272,606,815.50
LONG TERM OUTCOME 2 - More Sustainable and Resilient Built Environment	\$15,777,799.40	\$43,670,513.40	\$30,507,183.70	\$18,749,234.16	\$14,667,753.62	\$123,372,484.28
LONG TERM OUTCOME 3 - Climate Change and Disaster Risk Management mainstreamed across all sectors	\$7,426,896.48	\$14,690,359.80	\$7,289,948.20	\$9,209,106.00	\$8,383,606.00	\$46,999,916.48
LONG TERM OUTCOME 4 - Effective Enabling Environment	\$4,126,176.39	\$4,566,086.99	\$5,340,470.40	\$5,020,470.40	\$5,016,064.40	\$24,069,268.58
SUB-TOTAL	\$51,944,456.47	\$126,322,146.39	\$107,879,766.50	\$90,047,569.76	\$90,854,545.72	\$467,048,484.84

Table 08: Summary Sector MTEF.

Overarching Sector Goal: Enhanced environmental sustainability and Improved climate and disaster resilience.	TOTAL		TOTAL SECURED FUNDING	SECURED FUNDING		TOTAL SHORTFALL	SHORTFALL		TOTAL
	RECURRENT	INVESTMENT		RECURRENT	INVESTMENT		RECURRENT	INVESTMENT	
LONG TERM OUTCOME 1 - Sustainable Management and Development of Natural Resources and Environment Improved	\$67,564,176.00	\$205,042,639.50	\$221,701,477.50	\$58,952,274.00	\$162,749,203.50	\$50,905,338.00	\$8,611,902.00	\$42,293,436.00	\$272,606,815.50
LONG TERM OUTCOME 2 - More Sustainable and Resilient Built Environment	\$30,167,920.00	\$93,204,564.28	\$76,951,286.28	\$29,147,722.00	\$47,803,564.28	\$46,421,198.00	\$1,020,198.00	\$45,401,000.00	\$123,372,484.28
LONG TERM OUTCOME 3 - Climate Change and Disaster Risk Management mainstreamed across all sectors	\$13,500,310.00	\$33,499,606.48	\$35,289,143.48	\$11,326,447.00	\$23,962,696.48	\$11,710,773.00	\$2,173,863.00	\$9,536,910.00	\$46,999,916.48
LONG TERM OUTCOME 4 - Strengthened Sector Governance and Orientation	\$16,479,265.20	\$7,590,003.38	\$20,102,790.58	\$14,303,787.20	\$5,799,003.38	\$3,966,478.00	\$2,175,478.00	\$1,791,000.00	\$24,069,268.58
SUB-TOTAL	\$127,711,671.20	\$339,336,813.64	\$354,044,697.84	\$113,730,230.20	\$240,314,467.64	\$113,003,787.00	\$13,981,441.00	\$99,022,346.00	\$467,048,484.84

4.4.2.1 Financing Needs for LTO 1: Sustainable Management of Natural Resources and Environment Improved

Total financing needs for LTO 1 is estimated at \$273 million Tala, with investment costs accounting for a considerable 75 per cent, while recurrent costs are estimated at 25 per cent. Table 09 provides a summary of financing needs for LTO 1 at the ESPO level for this NESP period. Detailed MTEF for LTO 1 is presented in Table 10.

LTO 1 receives significant financial support from the EU, through the Water and Sanitation Sector Budget Support, GEF funded projects and others including the World Bank. Following the approval of Samoa's first GCF proposal on integrated flood management in the Vaisigano Catchment, LTO 1 stands to receive USD\$57 million (approximately \$120 million Tala) to be disbursed in the last four years of the NESP under ESPO 1.1.

A considerable proportion of the total financing needs estimated at 81 per cent, is already secured under the Water and Sanitation Sector's EU funded Sector Budget Support and external grants from projects such as the Strengthening Multi-Sectoral Management of Critical Landscapes (SMSMCL), Economy-wide Integration of Climate Change Adaptation and Disaster Risk Management (EWACC), Pacific Resilience Program (PREP), Ridge to Reef (R2R), Green Climate Fund (GCF), and government funding.

Shortfall of funds is estimated at 19 per cent of total financing needs and represents a shortfall of funds in ESPOs 1.2, 1.3a, 1.3b, 1.4 and 1.5 respectively. There is no shortfall of funds foreseen for ESPO 1.1 for this NESP period.

a) ESPO 1.1: Sustainable Management and Development of Water Resources Improved

Financing needs to enhance sustainable management of water resources are estimated at \$150 million Tala in total. This includes initiatives to strengthen IWRM Planning through watershed management, integrated flood management, water resources monitoring and information, and enforcement of the policy and regulatory framework. Investment costs are estimated at \$50 million Tala which accounts for 97 per cent of the total financing needs. Recurrent accounts for 3 per cent at \$4.8 million Tala.

More than \$120 million Tala will be injected into ESPO 1.1 from the GCF project, to implement integrated flood management solutions, for enhanced climate resilience of the Vaisigano Catchment. Implementation is scheduled to commence from Year 2 to Year 5 of the NESP period, resulting in the huge increase of financing needs for ESPO 1.1 in the last four years of the NESP.

The EU funded Sector Budget Support, through the Water and Sanitation Sector Programme, will contribute approximately \$23 million Tala towards identified investment needs with additional support from the World Bank's Pacific Resilience Project, the SMSMCL Project, the EWACC Project, and the regional Ridge to Reef Project with SPC. Recurrent needs, which currently stands at \$4.8 million Tala, are fully secured under government funding. This includes personnel and operational costs, and the annual commemoration of the World Water and Forest Day. There is no shortfall of funds projected for ESPO 1.1 during this NESP period.

b) ESPO 1.2: Sustainable Management and Development of Forests Improved

Approximately \$21 million Tala is needed to strengthen the sustainable management and development of forests and forest resources. This will include the protection and conservation of key biodiversity areas such as national parks, community conservation areas, promotion of forest research and development initiatives, as well as improvements to the existing policy and legislative framework.

Of this amount, 48 per cent relates to recurrent needs with 52 per cent on investments. Approximately 54 per cent (\$11 million Tala) of identified financing needs are secured through two existing projects: Integrating Climate Change into the Forest Sector (ICCRIFS) and Forest and Protected Areas Management (FPAM). Additional support is also available under the SMSMCL and Adaptation Fund Projects, as well as government funding for personnel and operational costs. It should be noted, that the ICCRIFS and FPAM Projects are scheduled to be completed within the second year of the NESP.

As a result, there is a 46 per cent shortfall of funds overall, attributed to a shortfall in investment needs. This includes costs of managing national parks and community conservation areas estimated at \$9.6 million Tala for five years. Recurrent needs on the other hand are secured under government funding. This includes personnel and operational costs of approximately \$9.5 million Tala, international and regional contributions to the RAMSAR, Commonwealth Forestry Association, Asia Pacific Association and the annual commemoration of the World Wetlands Day.

c) ESPO 1.3a: Sustainable Management and Development of Lands Improved

Total financing needs for sustainable management and development of lands is estimated at \$68 million Tala for five years. Investment needs account for 53 per cent (\$36 million Tala), while recurrent needs account for 47 per cent (\$32 million Tala).

In terms of resource availability, 55 per cent of financing needs are secured primarily through external funding from existing projects like the SMSMCL Project, the UNCCD NAP Project and government funding. Secured investments account for 36 per cent of secured financing needs which are largely funded under the SMSMCL Project. The remaining 64 per cent relates to secured recurrent needs involving personnel and operational costs and national policy initiatives funded by the government. This includes land compensation amounting to \$12.7 million Tala and road works for leased lands estimated at \$2.5 million Tala over the NESP period.

Shortfall of funds is estimated at \$30 million Tala or 45 per cent of total financing needs. This includes an estimated \$20 million Tala worth of investment needs to implement the LDN Target Setting Programme under the UNCCD NAP and \$2.5 million Tala of investments needed by the Agriculture Sector to implement capacity building developments for organic farming and sustainable agricultural resource management.

d) ESPO 1.3b: Spatial Information and Technical Services to support Sustainable Development of Lands Improved

Financing needs for improvements in spatial information and technical services are estimated at \$6 million Tala, constituting only 2 per cent of total financing needs for LTO 1. Recurrent costs are estimated at 78 per cent of identified financing needs with investments accounting for 22 per cent. A significant proportion of funds (71 per cent) is secured through government funding in relation to personnel and operational costs. There are no existing projects, therefore the \$1.31 million Tala of investment needs is not secured and constitutes 75 per cent of the total shortfall overall.

e) ESPO 1.4: Protection and Conservation of Terrestrial Biological Diversity Strengthened

Protection and conservation of terrestrial biological diversity needs approximately \$14 million Tala to undertake ecological conservation and protection of the terrestrial environment including management

of national reserves for the period of the NESP. This amount includes \$6.5 million Tala of financing needs from the Agriculture Sector's Outcome 4.5 relating to bio-security.

Approximately 39 per cent of financing needs are recurrent costs with 97 per cent of these costs already secured under government funding. Investment costs account for the remaining 61 per cent, of which only 2 per cent is secured through co-financing support from projects like SMSMCL while a significant 98 per cent of investment needs are not secured. Total shortfall of funds is therefore estimated at approximately \$8 million Tala or 60 per cent of financing needs.

f) ESPO 1.5: Sustainable Management and Development of Oceans Improved

Financing needs to improve the sustainable management and development of oceans are estimated at \$14 million Tala for this NESP period. This includes protection and conservation of the marine environment, sustainable management of fisheries resources through the Agriculture Sector and ocean monitoring.

Recurrent costs account for 78 per cent of total financing needs, while investment needs constitute the remaining 22 per cent of total costs. A considerable proportion of identified financing needs is already secured through government funding and existing projects like the Climate and Oceans Support Program in the Pacific (COSPPac). Recurrent costs are secured (100%) by the government, comprising personnel and operational costs of MNRE and MAF under relevant divisions. The Agriculture Sector through MAF accounts for just over half of investment needs at \$1.64 million Tala (54 per cent). A minimal 6.7 per cent of funds remain unsecured.

Table 09: Summarized MTEF for LTO 1, as per ESPO.

LONG TERM OUTCOME (LTO) 1 - Sustainable Management and Development of Natural Resources and Environment Improved	FY2016/17	FY2017/18	FY2018/19	FY2019/20	FY2020/21	TOTAL
ESPO 1.1 Sustainable Management and Development of Water Resources Improved	\$4,831,484.00	\$41,069,550.00	\$39,123,464.00	\$31,449,559.00	\$33,803,971.50	\$150,278,028.50
ESPO 1.2 Sustainable Management and Development of Forests Improved	\$4,008,963.20	\$4,252,999.20	\$4,307,999.20	\$4,222,999.20	\$4,111,949.20	\$20,904,910.00
ESPO 1.3a Sustainable Management and Development of Lands Improved	\$9,330,582.00	\$11,529,582.00	\$14,483,076.00	\$14,493,076.00	\$17,873,076.00	\$67,709,392.00
ESPO 1.3b Spatial information and Technical Services to support Sustainable Land Developments Improved	\$925,261.00	\$955,261.00	\$1,203,331.00	\$1,413,331.00	\$1,533,331.00	\$6,030,515.00
ESPO 1.4 Protection and Conservation of Biological Diversity Strengthened	\$3,000,388.00	\$2,750,388.00	\$2,771,388.00	\$2,529,388.00	\$2,654,388.00	\$13,705,940.00
ESPO 1.5 Sustainable Management and Development of Oceans improved	\$2,516,906.00	\$2,837,406.00	\$2,852,906.00	\$2,960,406.00	\$2,810,406.00	\$13,978,030.00
SUB-TOTAL	\$24,613,584.20	\$63,395,186.20	\$64,742,164.20	\$57,068,759.20	\$62,787,121.70	\$272,606,815.50

Table 10: Detailed MTEF for LTO 1, as per ESPO.

LONG TERM OUTCOME (LTO) 1 - Sustainable Management and Development of Natural Resources and Environment Improved				SECURED FUNDING		SHORTFALL		Total
	Recurrent	Investment	Total	Recurrent	Investment	Recurrent	Investment	
ESPO 1.1 Sustainable Management and Development of Water Resources Improved	\$4,811,275.00	\$145,466,753.50	\$150,278,028.50	\$4,811,275.00	\$145,466,753.50	\$0.00	\$0.00	\$150,278,028.50
ESPO 1.2 Sustainable Management and Development of Forests Improved	\$9,924,044.00	\$10,980,866.00	\$20,904,910.00	\$9,924,044.00	\$1,404,950.00	\$0.00	\$9,575,916.00	\$20,904,910.00
ESPO 1.3a Sustainable Management and Development of Lands Improved	\$31,774,392.00	\$35,935,000.00	\$67,709,392.00	\$23,745,380.00	\$13,585,000.00	\$8,029,012.00	\$22,350,000.00	\$67,709,392.00
ESPO 1.3b Spatial information and Technical Services to support Sustainable Land Developments Improved	\$4,725,515.00	\$1,305,000.00	\$6,030,515.00	\$4,286,305.00	\$0.00	\$439,210.00	\$1,305,000.00	\$6,030,515.00
ESPO 1.4 Protection and Conservation of Biological Diversity Strengthened	\$5,384,420.00	\$8,321,520.00	\$13,705,940.00	\$5,240,740.00	\$190,000.00	\$143,680.00	\$8,131,520.00	\$13,705,940.00
ESPO 1.5 Sustainable Management and Development of Oceans improved	\$10,944,530.00	\$3,033,500.00	\$13,978,030.00	\$10,944,530.00	\$2,102,500.00	\$0.00	\$931,000.00	\$13,978,030.00
SUB-TOTAL	\$67,564,176.00	\$205,042,639.50	\$272,606,815.50	\$58,952,274.00	\$162,749,203.50	\$8,611,902.00	\$42,293,436.00	\$272,606,815.50

4.4.2.2 Financing needs for LTO 2 - More Sustainable and resilient built environment.

Total financing needs for LTO 2 is estimated at \$123 million Tala, comprising 76 per cent of investment needs and 24 per cent of recurrent needs. Approximately 62 per cent (\$77 million Tala) of this amount is secured mainly through existing projects and sector budget support under ESPOs 2.3, 2.4 and 2.5 respectively. This also includes government funded personnel and operational costs, rubbish collection and maintenance contracts for public toilets and sludge treatment facilities. The proportion of shortfall is estimated at 38 per cent.

Personnel and operational costs of other key IAs with shared roles and responsibilities have been incorporated in total estimates. For example, the MAF through its Quarantine Division for ESPO 2.2, the MWTI through its Asset Management - Building Division and the MOH through its Public Health Surveillance Division for ESPO 2.3.

a) ESPO 2.1: Sustainable management of solid waste improved

Improvements to the management of solid waste will require \$31 million Tala for the five years of the NESP. Recurrent costs account for 43 per cent of total financing needs while investment costs account for 57 per cent.

Approximately 42 per cent of total financing needs is secured through government funding. This includes waste management and lawn maintenance contracts, personnel and operational costs. The shortfall in recurrent costs of only 3 per cent, relates to planned institutional changes that could see the Waste Management Section, with a small staff base currently operating under the Division of Environment and Conservation (DEC), expand into a fully fledged Division with its own ACEO and staff. This is assuming Government decides to implement recommendations from the PSC Functional Analysis to set up a specialized unit dedicated to waste management. Also pending is a decision on privatization of waste management.

The substantial increase in FY18/19 of \$10.18 million Tala is attributed to scheduled improvements to the Tafaigata Landfill and construction of a new waste landfill for Savaii planned for that year. There are no existing development projects to finance identified investment needs of ESPO 2.1 resulting in a significant funding gap totaling \$18 million Tala or 58 per cent of total needs.

b) ESPO 2.2: Sound management of chemicals and hazardous waste improved

Sound management of chemicals and hazardous waste will cost approximately \$8 million Tala to achieve in this NESP period, through strengthened policy and legislative framework, increased capacity to monitor chemicals and hazardous waste, as well as increased public awareness. Key aspects of the Agriculture Sector Plan (ASP) 2016 - 2020 under its ESPO 4, have been integrated into the NESP's ESPO 2.2 costed action plan and medium term expenditure framework. These activities focus on compliance with the Pesticides Act and Regulations, trainings and certification of agricultural chemical users.

MAF accounts for a substantial amount of identified financing needs estimated at \$6.66 million Tala (83 per cent), where \$5.89 million Tala is attributed to personnel and operational costs of the Quarantine Division with \$0.775 million Tala worth of investments. MNRE with a small staff base responsible for chemicals and hazardous waste, account for the remaining 17 per cent, about \$1.33 million Tala, of which 38 per cent is attributed to recurrent costs and 62 per cent to investment costs.

Overall 82 per cent of total financing needs are secured through Government funding with an 18 per cent shortfall that is predominantly investment related.

c) ESPO 2.3: Management of wastewater improved

A number of key implementing agencies are involved in the implementation of ESPO 2.3, including two MNRE divisions - PUMA and DEC; the National Health Surveillance Division of the MOH, the Asset Management-Building division of the MWTI, the Wastewater Division of the Samoa Water Authority (SWA), the Samoa Tourism Authority (STA) and the Plumbers Association of Samoa (PAS).

Financing needs to increase compliance with sanitation and wastewater regulations are estimated at \$16 million Tala in total, with 29 per cent being recurrent costs and 71 per cent investments. A significant percentage of these estimates (96 per cent) are already secured under the Water and Sanitation Sector's investment programme funded by the EU Sector Budget Support. Total shortfall is minimal at 4 per cent , and involves plans to undertake feasibility studies for additional sludge treatment facilities, which are scheduled to take place in the last two years of the NESP by the MNRE.

d) ESPO 2.4: Low carbon developments through energy efficiency and renewable energy improved

Total financing needs have been identified to strengthen the policy and legislative framework, research and development, partnership arrangements, and wider public awareness on energy efficiency and renewable energy, is estimated at approximately \$8 million Tala. Of this amount 17 per cent is attributed to recurrent costs and 83 per cent to investments. Approximately 65 per cent of identified financing needs are secured through existing projects such as the IUCN (International Union for the Conservation of Nature), INDC, GEF 6, Technical Assistance to Address Climate Change (TAACC) 1 & 2 and the Water and Sanitation Sector EU Budget Support. Total shortfall is estimated at 35 per cent of total financing needs.

e) ESPO 2.5: Sustainable development planning and environmental monitoring improved

Financing needs to achieve effective sustainable planning and development are estimated at a considerable \$61 million Tala, significantly higher than the financing needs of other ESPOs under LTO 2. This is attributed to a large extent, to the implementation of infrastructural type developments for the Apia Waterfront, enhancement of coastal and communities resilience, and implementation of updated District CIM Plans. Investment costs therefore account for a significant 93 per cent of total financing needs while recurrent costs account for only 7 per cent .

There is no shortfall in recurrent costs except for investments at 42 per cent of total investment needs. The other 58 per cent of investment costs are secured under existing projects, namely the Apia Waterfront Development Project funded by the Government of New Zealand and the Chinese Huizhou City, the World Bank's PPCR and the GEF Adaptation Fund projects. Recurrent costs are funded by the Government. Overall, approximately 61 per cent of financing needs are already secured with total shortfall at 39 per cent .

Table 11: Summarized MTEF for LTO 2, as per ESPO.

Long Term Outcome (LTO) 2 - More Sustainable and Resilient Built Environment	FY2016/17	FY2017/18	FY2018/19	FY2019/20	FY2020/21	TOTAL
ESPO 2.1 Sustainable Management of Solid Waste Improved	\$2,606,070.00	\$6,238,070.00	\$10,178,086.00	\$6,058,086.00	\$6,058,086.00	\$31,138,398.00
ESPO 2.2 Sound Management of Chemicals and Hazardous Waste Improved	\$1,687,722.00	\$1,675,722.00	\$1,541,722.00	\$1,541,722.00	\$1,541,722.00	\$7,988,610.00
ESPO 2.3 Management of Wastewater Improved	\$3,976,194.00	\$3,289,908.00	\$2,604,562.30	\$2,756,612.76	\$3,210,132.22	\$15,837,409.28
ESPO 2.4 Low Carbon Developments through Energy Efficiency and Renewable Energy Improved	\$684,211.40	\$2,279,211.40	\$2,999,211.40	\$1,209,211.40	\$674,211.40	\$7,846,057.00
ESPO 2.5 Sustainable Development Planning and Environmental Monitoring Improved	\$6,823,602.00	\$30,187,602.00	\$13,183,602.00	\$7,183,602.00	\$3,183,602.00	\$60,562,010.00
SUB-TOTAL	\$15,777,799.40	\$43,670,513.40	\$30,507,183.70	\$18,749,234.16	\$14,667,753.62	\$123,372,484.28

Table 12: Detailed MTEF for LTO 2, as per ESPO.

Long Term Outcome (LTO) 2 - More Sustainable and Resilient Built Environment	Recurrent	Investment	Total	SECURED FUNDING		SHORTFALL		Total
				Recurrent	Investment	Recurrent	Investment	
ESPO 2.1 Sustainable Management of Solid Waste Improved	\$13,388,398.00	\$17,750,000.00	\$31,138,398.00	\$12,968,350.00	\$0.00	\$420,048.00	\$17,750,000.00	\$31,138,398.00
ESPO 2.2 Sound Management of Chemicals and Hazardous Waste Improved	\$6,728,610.00	\$1,260,000.00	\$7,988,610.00	\$6,388,460.00	\$189,000.00	\$340,150.00	\$1,071,000.00	\$7,988,610.00
ESPO 2.3 Management of Wastewater Improved	\$4,626,845.00	\$11,210,564.28	\$15,837,409.28	\$4,626,845.00	\$10,610,564.28	\$0.00	\$600,000.00	\$15,837,409.28
ESPO 2.4 Low Carbon Developments through Energy Efficiency and Renewable Energy Improved	\$1,306,057.00	\$6,540,000.00	\$7,846,057.00	\$1,046,057.00	\$4,040,000.00	\$260,000.00	\$2,500,000.00	\$7,846,057.00
ESPO 2.5 Sustainable Development Planning and Environmental Monitoring Improved	\$4,118,010.00	\$56,444,000.00	\$60,562,010.00	\$4,118,010.00	\$32,964,000.00	\$0.00	\$23,480,000.00	\$60,562,010.00
SUB-TOTAL	\$30,167,920.00	\$93,204,564.28	\$123,372,484.28	\$29,147,722.00	\$47,803,564.28	\$1,020,198.00	\$45,401,000.00	\$123,372,484.28

4.4.2.3 Financing needs for LTO 3 - Climate Change and Disaster Risk Management mainstreamed across all sectors

Total funds needed to mainstream and integrate climate change and disaster risk management across all sectors is estimated at approximately \$47 million Tala. LTO 3 consists of ESPO 3.1 which accounts for 18 per cent of total financing needs, ESPO 3.2 at 60 per cent and ESPO 3.3 at 22 per cent. About 71 per cent of total financing needs is investment related with recurrent needs estimated at 29 per cent. Secured funding under existing projects like EWACC, RIO, PREP, CDCRM, EDF10 ACP-EU and through government budget accounts for 75 per cent of total financing needs. The remaining 25 per cent represents LTO 3's shortfall of funds for this NESP period.

a) ESPO 3.1: Integration of climate change across all sectors improved

Approximately \$9 million Tala of financing needs has been identified to strengthen mainstreaming of climate change across all sectors. This includes planned improvements to the policy, legislative and institutional framework for climate change, the management and coordination of climate change related projects, as well as the preparation and development of project proposals.

The total financing needs for this ESPO, constitutes 16 per cent of recurrent costs, and 84 per cent of investments. Secured funding is estimated at 69 per cent under existing projects such as the Rio Project, EWACC and the IMPRESS Project.

b) ESPO 3.2: Public leadership, coordination, development and implementation activities for disaster risk management improved

Mainstreaming disaster risk management through public leadership, coordination, development and implementation of activities for climate and disaster resilience will cost the Sector \$28 million Tala. Recurrent costs account for 15 per cent of total financing needs while investments account for 85 per cent. There are a number of projects already in place to deliver on ESPO 3.2 such as PREP, CDCRM, EWACC and the EDF10 ACP-EU Projects. Approximately 77 per cent of financing needs are already secured under these projects and government funding with 23 per cent unsecured.

c) ESPO 3.3: Meteorological, Atmospheric and Geo-Scientific Information and Data improved

Improvements to the provision of meteorological, atmospheric and geo-scientific services will require financing needs estimated at \$10 million Tala. This will include strengthening of the policy and legislative framework and improvements to weather and climate services, protection of the ozone which includes plans to setup a fully fledged air quality monitoring unit and geo-scientific services. Recurrent needs are estimated at 77 per cent while investments account for 23 per cent. Approximately 74 per cent of financing needs are secured under current projects and government funding through personnel and operational costs. Total shortfall is estimated at 26 per cent of total financial needs.

Table 13: Summarized MTEF for LTO 3, as per ESPO.

Long Term Outcome (LTO) 3 - Climate Change and Disaster Risk Management mainstreamed across all sectors	FY2016/17	FY2017/18	FY2018/19	FY2019/20	FY2020/21	TOTAL
ESPO 3.1 Integration of Climate Change Across All Sectors Improved	\$1,587,619.00	\$1,699,419.00	\$1,607,419.00	\$1,827,419.00	\$2,017,419.00	\$8,739,295.00
ESPO 3.2 Public Leadership, Coordination, Development and Implementation of Activities for Disaster Risk Management Improved	\$4,232,879.48	\$11,203,584.80	\$3,306,347.20	\$5,262,505.00	\$4,137,005.00	\$28,142,321.48
ESPO 3.3 Meteorological, Atmospheric and Geo-Scientific Information and Data Improved	\$1,606,398.00	\$1,787,356.00	\$2,376,182.00	\$2,119,182.00	\$2,229,182.00	\$10,118,300.00
SUB-TOTAL	\$7,426,896.48	\$14,690,359.80	\$7,289,948.20	\$9,209,106.00	\$8,383,606.00	\$46,999,916.48

Table 14: Detailed MTEF for LTO 3, as per ESPO.

Long Term Outcome (LTO) 3 - Climate Change and Disaster Risk Management mainstreamed across all sectors				SECURED FUNDING		SHORTFALL		Total
	Recurrent	Investment	Total	Recurrent	Investment	Recurrent	Investment	
ESPO 3.1 Integration of Climate Change Across All Sectors Improved	\$1,392,185.00	\$7,347,110.00	\$8,739,295.00	\$497,450.00	\$5,516,200.00	\$894,735.00	\$1,830,910.00	\$8,739,295.00
ESPO 3.2 Public Leadership, Coordination, Development and Implementation of Activities for Disaster Risk Management Improved	\$4,300,825.00	\$23,841,496.48	\$28,142,321.48	\$3,800,825.00	\$17,951,496.48	\$500,000.00	\$5,890,000.00	\$28,142,321.48
ESPO 3.3 Meteorological, Atmospheric and Geo-Scientific Information and Data Improved	\$7,807,300.00	\$2,311,000.00	\$10,118,300.00	\$7,028,172.00	\$495,000.00	\$779,128.00	\$1,816,000.00	\$10,118,300.00
SUB-TOTAL	\$13,500,310.00	\$33,499,606.48	\$46,999,916.48	\$11,326,447.00	\$23,962,696.48	\$2,173,863.00	\$9,536,910.00	\$46,999,916.48

4.4.2.4 Financing needs for LTO 4 - Effective Enabling Environment

a) ESPO 4.1: Sector Governance and cross - sectoral coordination strengthened

Total financing needs is estimated at \$24 million Tala for ESPO 4.1 towards strengthening the Sector's enabling environment. This involves strengthening of sector governance and coordination through improved sector wide planning, coherent policy and legislative frameworks, monitoring and evaluation including institutional capacity building, information management and communication and medium term expenditure planning. Approximately 67 per cent of total financing needs are made up of recurrent costs and 33 per cent of investments. An estimated 89 per cent of total financing needs are secured under the government budget and largely under the EU Sector budget support. MNRE is responsible for coordination of two sectors; the Environment Sector and the Water and Sanitation Sector. The latter is fully funded under the EU funded Sector Budget Support, accounting for a substantial portion of secured funds under LTO 4.

Table 15: Summarized MTEF for LTO 4, as per ESPO.

LONG TERM OUTCOME (LTO) 4 - Effective Sector Enabling Environment	FY2016/17	FY2017/18	FY2018/19	FY2019/20	FY2020/21	TOTAL
ESPO 4.1 Sector Governance and cross sectoral coordination strengthened	\$4,126,176.39	\$4,566,086.99	\$5,340,470.40	\$5,020,470.40	\$5,016,064.40	\$24,069,268.58
SUB-TOTAL	\$4,126,176.39	\$4,566,086.99	\$5,340,470.40	\$5,020,470.40	\$5,016,064.40	\$24,069,268.58

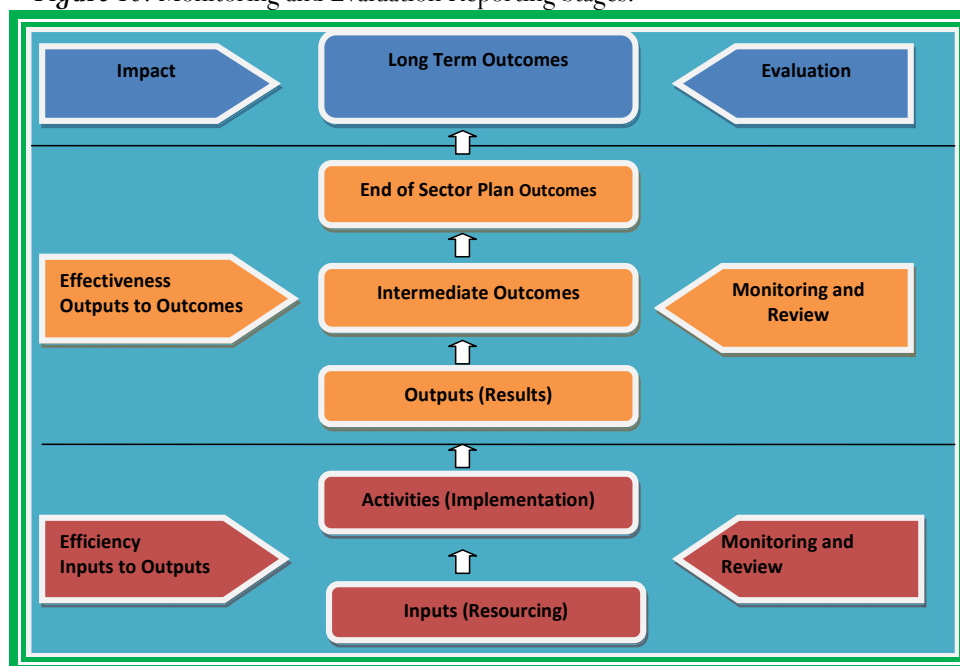
Table 16: Detailed MTEF for LTO 4, as per ESPO.

LONG TERM OUTCOME (LTO) 4 - Effective Enabling Environment				SECURED FUNDING		SHORTFALL		Total
	Recurrent	Investment	Total	Recurrent	Investment	Recurrent	Investment	
ESPO 4.1 Sector Governance and cross sectoral coordination strengthened	\$16,479,265.20	\$7,590,003.38	\$24,069,268.58	\$14,303,787.20	\$5,799,003.38	\$2,175,478.00	\$1,791,000.00	\$24,069,268.58
SUB-TOTAL	\$16,479,265.20	\$7,590,003.38	\$24,069,268.58	\$14,303,787.20	\$5,799,003.38	\$2,175,478.00	\$1,791,000.00	\$24,069,268.58

4.5 Monitoring, Evaluation and Reporting

The Sector's Monitoring, Evaluation and Reporting Framework, constitutes the Performance Management Framework with which to monitor progress of the NESP's implementation and identified high level indicators measuring the impact of sector interventions. The performance of the sector will be monitored and evaluated based on; (a) the level of impact it will have on the community; (b) its effectiveness in terms of the outputs that it will produce against identified outcomes; and (c) efficiency in terms of resource allocation and utilization to deliver on these outputs (see Figure 10 below).

Figure 10: Monitoring and Evaluation Reporting Stages.



4.5.1 Monitoring and Reporting

NESP reporting requirements will include a standardized reporting template to facilitate progress reporting on a quarterly and annual basis. Sector monitoring, reviews and reporting will be carried out through:

- quarterly reporting to the NESSC;
- national budget planning, mid-term and full term budget reviews facilitated by MOF;
- annual planning and reviews of management plans or operational plans of IAs; and
- Sector annual reviews.

4.5.2 Evaluation and State of the Environment Assessment

Independent evaluations will be carried out in the final year of the NESP. The timing of the evaluation will coincide with periodic state of the environment assessments and reporting, which will establish the impact of sector interventions on the state and health of the 8 habitat types (see Table 01) using SOE indicators. These indicators form the high level indicators for the NESP M&E Framework. Baseline information and data will be collected and confirmed in the next state of the environment assessment, after which trends and changes over time will be established and updated every 4-5 years.

Moreover, these high level indicators have been mapped to relevant SDS Key Outcomes and Strategic Outcomes, as well as to relevant SDGs, to strengthen alignment and streamline monitoring and reporting efforts. This is demonstrated in Tables 15 and 16.

Table 17: Sector High Level Indicators Map for LTO1, against SDS and SDGs.

Sustainable Development Goals (SDGs)	SDG Targets	Strategy for the Development of Samoa (SDS)	National Environment Sector Plan (NESP)	End of Sector Plan Outcomes (ESPOs)	State of Environment (SOE) Indicators for Assessment at Impact Level
Goal 6: Ensure availability and sustainable management of water and sanitation for all	6.1.1 / 6.2.1 / 6.3.2 / 6.5.1 / 6.6.1	Priority Area 3 - Infrastructure (KO9): Access to Clean Water and Sanitation Sustained. Strategic Outcome - Water Resources managed in an integrated and sustainable manner: Cumulative total hectares of prioritised watershed areas rehabilitated and/or declared reserves increased; Priority Area 4 - Environment (KO 13): Environmental Resilience Improved. Strategic Outcomes - Protection, conservation and sustainability of environmental and natural resources improved: (1)Number of key habitats and "at risk" species protected increased; (2) Areas of forests and marine sites protected increased; (3)Protection plans implemented for "at risk" species.		ESPO 1.1 Sustainable Management and Development of Water Resources Improved	Number/degree watershed management plans implemented; Cumulative total hectares of watershed areas rehabilitated and / or reserved % change in average flow/discharge rates of rivers and streams No. of perennial streams with minimum environmental flow requirements defined Change in groundwater level (potentiometric map) Water quality (turbidity/DO/pH) % of catchment areas with forest cover exceeding 70% of total catchment areas
Goal 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	15.1.2/ 15.2.1/ 15.3.1/ 15.4.1	Priority Area 1 - Economic (KO 2): Agriculture and Fisheries Productivity Increased. Strategic Outcome : Agriculture/fisheries sector 100% compliance with climate, disaster and biosecurity policies.		ESPO 1.2 Sustainable Management and Development of Forests Improved	% of lowland and upland areas under forest cover % of lowland and upland forests dominated by non-native species % of lowland and upland forest areas affected by <i>Merremia peltata</i> vine % of cultivated areas using inorganic fertilizers and agricultural chemicals % of cultivated areas using organic fertilizers only % of cultivated areas under multiple cropping systems
	15.5.1/ 15.8.1/ 15.9.1			ESPO 1.3 Sustainable Management and Development of Lands Improved	volume (m ³) of sand approved for mining/year; # of sand mining licences granted/year; # of new beaches mined / year Volume (m3) of land approved for mining/year Area of reclaimed lands approved / year
	14.5.1/ 14.2.1/ 15.1.2/ 15.4.1			ESPO 1.4 Protection and Conservation of Terrestrial Biological Diversity Improved	% of native bird/mammal spp with increasing or stable populations % of native bird/mammal species present Species of high conservation value (IUCN Red List)
Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development	14.4.1 / 14.5.1/ 14.7.1			ESPO 1.1 - 1.5	Area coverage - % change in area coverage relative to baseline Area coverage - % of total KBAs with legal status Number of KBAs with management plans and under implementation
				ESPO 1.5 Sustainable Management and Development of Oceans Improved	Total area coverage of mangroves # of viable mangrove communities Species richness – % of native species with viable populations Abundance/biomass - % change in biomass relative to baseline Species richness – no. of incidences of occurrences of species in sample population Coral community structure – subjective assessment based on expert observation Fish Abundance/biomass - % change in biomass relative to baseline Fish species richness - no. of incidences of occurrences of species in sample population

Table 18: Sector High Level Indicators Map for LTO 2&3, against SDS and SDGs.

Sustainable Development Goals (SDGs)	SDG Targets	Strategy for the Development of Samoa (SDS)	National Environment Sector Plan (NESP)	End of Sector Plan Outcomes (ESPOs)	State of Environment (SOE) Indicators for Assessment at Impact Level
Goal 12: Ensure sustainable consumption and production patterns	12.2.1/ 12.2.2/12.4.1/ 12.4.2	Priority Area 4 (KO 13) Environmental resilience improved. Strategic Outcomes - (1) Built environment is more sustainable: - New buildings are 100% compliance with disaster and climate resilience standards; (2) Environmental compliance strengthened: - Conservation areas protected and area increased; and (3) Climate and Disaster Resilience planning improved.	LTO 2 More sustainable and resilient built environment	ESPO2.1 Sustainable management of solid waste improved	% change in waste generation rate per capita per day relative to an established baseline; % of hh waste reaching landfill relative to total waste generated % total hh population accessible to public-funded waste collection system; % increase in vol of solid waste recycled relative to baseline
Goal 6: Ensure availability and sustainable management of water and sanitation for all	6.2.1	Priority Area 3 (KO9): Access to clean water and sanitation. Strategic Outcomes - (1) Access to improved sanitation, wastewater systems and hygiene practices increased; (2) Access to improved sanitation to greater than 95% households;		ESPO2.3 Management of wastewater improved	% of hh with improved sanitation systems % increase in households etc. using biogas digesters % change in confirmed cases of diarrhea
Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all	7.1.1/ 7.1.2/ 7.2.1	Priority Area 3 (KO12): Quality energy supply. Strategic Outcomes - (1) Renewable Energy investment and generation increased - 100% capacity for renewable energy electricity by 2017; (2) Road transport energy policy planning improved: - Climate and disaster resilience management integrated into energy planning and implementation activities.		ESPO2.4 Low carbon developments through energy efficiency and renewable energy improved	% petroleum products imported 10 - 20% in RE generation for consumption relative to total energy used. % of improved energy efficiency and conservation implemented
Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable	11.1.1/ 11.7.1/ 11.6.2	Priority Area 4 (KO 14) Environmental Resilience Improved. Strategic Outcomes: Climate and disaster resilience and responsive planning improved: (1) Climate and disaster resilience integrated into all sector plans, Ministry and implementing agencies corporate plans; (2) 100% compliance of Ministries and implementing agencies with climate and disaster resilience plans.		ESPO2.5 Sustainable development planning and environmental monitoring improved	Annual growth rate less than 1.0% population density in urban/ rural areas % of development consents issued over total application received % of proposals modified on environmental grounds relative to annual total % of proposals for DC declined on environmental grounds
Goal 1: End poverty in all its forms everywhere Goal 13: Take urgent action to combat climate change and its impacts[b]	1.5.3 13.1.1/ 13.2.1/ 13.3.1		LTO 3 Climate Change and Disaster Risk Management mainstreamed in all sectors	ESPO 3.1 Integration of Climate Change across all sectors ESPO 3.2 Public leadership, coordination, development and implementation of activities for disaster risk management improved	Sector Plans integration of climate and disaster resilience; Public agencies, sectors, village and private business plans, preparedness and capacity for disaster and climate resilience Climate and disaster investment beneficiaries and benefits; Awareness levels of need for climate and disaster planning; Number of climate adaptation and mitigation projects completed and under implementation
				ESPO 3.3 Meteorological, atmospheric and geo-scientific information and data improved	Net GHG emitted (emission minus removals) # compliance companies and technicians - baseline 10% by 2015 (HCFC)

Operational Plans

“The cardinal honeyeater, Myzomela cardinalis, is common with a steady population in the the tropical forests of Samoa. The male species has a unique scarlet colour with high pitched vocals”



5. NESP Operational Plans

The NESP operational plans will facilitate the day to day management of the NESP in the course of its five year implementation. The plans will facilitate sector annual reviews, corporate and management planning, and reviews including budget planning involving government and external funding as well as leveraging for additional donor support.

The overall outcomes map for the Sector is provided in Table 19. It maps out the flow of the Sector's overarching goal down to 4 Long Term Outcomes, 15 End of Sector Plan Outcomes, and Intermediate Outcomes. Outcomes maps for individual LTOs specify outputs and activities as demonstrated in Tables 20, 39, 55 and 65. Costed Action Plans, Medium Term Expenditure Frameworks and Performance Management Frameworks are provided at the ESPO level.

Table 19: NESP Outcomes Map 2017-2021.

OVERARCHING GOAL: ENHANCED ENVIRONMENTAL SUSTAINABILITY AND IMPROVED CLIMATE AND DISASTER RESILIENCE			
LONG TERM OUTCOMES (LTO)			
1. Sustainable Management and Development of Natural Resources and Environment Improved	2. More Sustainable and Resilient Built Environment	3. Climate Change and Disaster Risk Management mainstreamed in all sectors	4. Effective enabling environment
END OF SECTOR PLAN OUTCOMES (ESPO)			
1.1 Sustainable management and development of water resources improved 1.2 Sustainable management and development of forests improved 1.3a Sustainable management and development of lands improved 1.3b Spatial information and technical services to support sustainable land developments improved 1.4 Protection and conservation of terrestrial biological diversity strengthened 1.5 Sustainable management and development of oceans improved	2.1 Sustainable management of solid waste improved 2.2 Sound management of chemicals and hazardous waste improved 2.3 Management of wastewater improved 2.4 Low carbon developments through energy efficiency and renewable energy increased 2.5 Sustainable development planning and environmental monitoring improved	3.1 Integration of climate change across all sectors improved 3.2 Public leadership, coordination, development and implementation of activities for disaster risk management improved 3.3 Meteorological, atmospheric and geo-scientific information and data improved	4.1 Sector governance and cross-sectoral coordination strengthened
INTERMEDIATE OUTCOMES			
Increased knowledge and understanding of natural resources management including sustainable land management practices	Increased capacity to monitor and manage all streams of waste	Increased understanding and awareness on mainstreaming climate and disaster resilience across all sectors	Improved and effective cross-sectoral governance
Increased coordination and integration of natural resource management, conservation and protection of biological diversity into socio-economic developments	Improved management of waste (solid waste, e-waste, chemicals and hazardous waste including healthcare waste)	Increased coordination, integration and mainstreaming of climate change and disaster risk management initiatives across all sectors	Increased institutional capacity to implement and enforce policy and legislative framework
Increased community and stakeholders engagement on critical environmental issues	Increased awareness of ewaste, chemicals and hazardous waste issues	Improved Information and Knowledge Management of climate change related data accessed by all	Increased institutional capacity to implement the NESP
Increased and improved information sharing between implementing agencies and stakeholders	Strengthened community and stakeholders engagement	Increased ownership and capacity of institutions in implementing respective climate change and disaster risk management priorities across all sectors	Increased coordination and collaboration between implementing agencies and sector stakeholders including communities
Increased compliance with legal frameworks	Increased compliance with legal frameworks in place.	Public leadership, coordination, development and implementation activities for climate and disaster resilience improved	Increased knowledge and understanding of the general public on environmental issues including climate change and disaster risk management
Increased appreciation and adoption of multi-sectoral and / or programmatic approaches	Increased multi-sectoral collaboration and coordination.	Strengthened community and stakeholders engagement in climate change and disaster risk management	Improved Information sharing and clearing house mechanism

Table 20: LTO 1 : Outcomes Mapping Framework 2017-2021.

LONG TERM OUTCOME 1: Sustainable Management and Development of Natural Resources and Environment Improved								
END OF SECTOR PLAN OUTCOMES (ESPO)								
1.1 Sustainable management of freshwater resources improved	1.2 Sustainable management and development of forests improved	1.3a Sustainable management and development of lands improved		1.3b Spatial information improved	1.4 Protection and conservation of terrestrial biological diversity strengthened		1.5 Sustainable management and development of oceans	
OUTPUTS								
Watershed management plans developed	Management Plans for National Parks and CCAs developed	National Land use Policy reviewed	Burial plots managed and maintained	Digitised and updated Cadastral Information	Environment Management and Conservation Act	Simulation exercises conducted annually	Marine Wildlife Protection Regulation 2009 amended	Eco-tourism activities promoted
Degraded watershed areas rehabilitated	Degraded forest areas replanted/ rehabilitated	Land Resource Management Act developed	Land Board meetings conducted	Number of survey plans reviewed and approved	Gataivai Management Plan developed	Border control maintained	Effective management of ballast water from ships	Research/survey on lesser known species conducted
River Ecosystem Health Management Program implemented	Agro-forestry / woodlots programs implemented	Land development activities regulated	Customary land leases managed effectively	Number of surveys executed	Recovery plans for critically endangered species	National Reserves managed and maintained	National Marine Sanctuary Framework implemented	Status of threatened and vulnerable species
Integrated Flood Management measures implemented	Management programs implemented	Awareness / educational programs implemented	Number of Instruments registered	Number of Land Survey Practitioners certified	Protected Areas established	Vailima National Reserves Office renovated	Marine Species Action Plan implemented	Research on migratory species of concern undertaken
Water Resources Monitoring Boreholes established and monitored	Trainings and workshops conducted for Farmers	Sustainable Development Village Plans developed	Land registration records and information updated	Land survey capacity upgraded	National legal framework for Nagoya Protocol developed	Reserves restored with native species	Legal Framework for Mangroves developed	Awareness and educational programs conducted
Potentiometric map updated	Organic Farming Advisory Committee meetings conducted	Critical landscapes restored	Number of court cases on land disputes attended to	Geographic Names established	NISAP reviewed	Nursery for native seedlings and wildlings upgraded	Management Plans for targeted turtle nesting areas developed	Staff trained in research programs
Telemetry system operational	Forestry Development Research undertaken	Sustainable agriculture programs implemented	Valuation of lands regulated	Regulations in place	SISERP 2015 - 2020 implemented	New reserves established in Upolu and Savaii	Coral Bleaching (CBR) Response Plan developed	100% (300) villages participating in community-based fisheries management program
Water resources quality monitoring guidelines developed		National Report to UNCCD developed						
Drought Policy developed	Forestry regulatory framework developed and reviewed	Land Degradation Neutrality (LDN) implemented	Stamp duty collected	Updated maps produced	Taxonomic data gaps for key selected sites identified	Inventory surveys conducted for all reserves	Status of established MPAs assessed	100% coverage of fishing related activities managed within Samoa's EEZ and Ports
Regulatory tools in place and implemented	Forestry Board quarterly meetings conducted	A fully operational organic farming unit in MAF with appropriate skills and resources	Land Valuation Committee meetings conducted	Geographic Names Board quarterly meetings conducted	Status of threatened & vulnerable (maomao, manumea etc) terrestrial species established	Reserves Management Plans reviewed and updated	Number of community based projects promoted and supported	Increased aquaculture/Mariculture fish/invertebrate production through environmentally
Water Resources Board meetings conducted		Improved capacity to promote sustainable farming practices and land use	Secretariat support to Land Commission provided					
Partnerships with CSOs/NGOs forged	Forestry Board quarterly meetings conducted	Updated land lease information available	Marketing Strategy for Economic use of Customary Lands developed	Ecotourism operations promoted	Awareness and educational programs implemented	National Plan of Action for Sharks developed	Number of awareness programs implemented	Disaster risk proof fishing practices and management included in fisheries plans and implemented
Number of awareness programs implemented		Lease payments collected and updated	Policy on economic use of customary lands developed					
Agriculture Water Use Strategy developed		Land taken for public purposes compensated			Invasive species database developed	Emergency Response Plan to manage Cetacean stranding developed	Ocean monitoring capacity and network increased	
ACTIVITIES								
1.1.1 Strengthen sustainable management of prioritised watershed areas	1.2.1 Strengthen sustainable management of forests	1.3a.1 Strengthen sustainable management and development of lands	1.3a.5 Effective Management of the Land Valuation Profession and Practice	1.3b.1 Provide Quality Cadastral Information	1.4.1 Improve ecological conservation, protection and restoration of the terrestrial environment		1.5.1 Strengthen sustainable management of the marine and coastal environment	
1.1.2 Improve water resources information and monitoring data	1.2.2 Strengthen research and development for sustainable management of forests	1.3a.2 Strengthen sustainable management of Government Lands	1.3a.6 Provide Administration services to the Land Commission	1.3b.2 Facilitate Land Surveys in line with Survey Act 2010	1.4.2 Strengthen management and maintenance of national reserves for ecological conservation purposes		1.5.2 Strengthen sustainable management of fisheries resources and control of fishing practices	
1.1.3 Increase compliance with water resources regulatory framework	1.2.3 Improve planning and policy framework for sustainable management of forests	1.3a.3 Strengthen management of customary land leases	1.3a.7 Provide administration services to the Customary Land Advisory Committee (CLAC)	1.3b.3 Provide effective and efficient Mapping services			1.5.3 Improve oceans monitoring information and data	
		1.3a.4 Effective Management of the Land Registration System						

Table 21: ESPO 1.1 : Costed Action Plan 2017-2021.

Long Term Outcome (LTO) 1 - Sustainable Management and Development Natural Resources and Environment Improved								
End of Sector Plan Outcome (ESPO)	1.1 Sustainable Management of Freshwater Resources Improved	YEAR AND COST OF IMPLEMENTATION IN SAMOAN TALA (SAT)					TOTAL	IMPLEMENTING PARTNERS
ACTIVITIES	SUB-ACTIVITIES	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21		
Activity 1.1.1 Strengthen sustainable management of prioritised watershed areas	1.1.1.1 Assess and characterise key watershed areas ie. Forest cover, bio-physical environment, landuse	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$100,000.00	MNRE - WRD/LMD/Tech/FOR/ DEC, MWCSO, Communities, NGOs
	1.1.1.2 Formulate, implement and enforce watershed management plans and regulatory tools in key watershed areas sustaining water supplies	\$30,000.00	\$30,000.00	\$30,000.00	\$30,000.00	\$30,000.00	\$150,000.00	MNRE - WRD/LMD/FOR/DEC/ Legal, Communities, MAF, MWCSO
	1.1.1.3 Rehabilitate and maintain key watershed areas through reforestation and sediment control along river banks (using both soft and hard solutions)	\$300,000.00	\$300,000.00	\$300,000.00	\$300,000.00	\$300,000.00	\$1,500,000.00	MNRE - WRD/FOR/LTA/MWTI, Communities
	1.1.1.4 Extend watershed conservation areas/reserves including taking by compensation of critical areas (upstream)	\$610,000.00	\$610,000.00	\$610,000.00	\$610,000.00	\$610,000.00	\$3,050,000.00	MNRE - WRD/LMD/MOF
	1.1.1.5 Promote the Upland Watershed Conservation Policy and facilitate research into the upland lakes (biodiversity, bio-physical, hydrological etc.)	\$70,000.00	\$70,000.00	\$70,000.00	\$70,000.00	\$70,000.00	\$350,000.00	MNRE - WRD/LMD/FOR/DEC/ Legal, Communities, OAG, MAF
	1.1.1.6 Implement appropriate Climate Change Adaptation and Disaster Risk Reduction measures in vulnerable watershed areas	\$500,000.00		\$750,000.00		\$750,000.00	\$2,000,000.00	MNRE - WRD/FOR/PUMA, Communities, NGOs
	1.1.1.7 Implement Integrated Flood Management to enhance climate resilience of the Vaisigano River Catchment GCF Project		\$33,785,745.00	\$33,499,320.00	\$25,112,915.00	\$27,012,827.50	\$119,410,807.50	MOF, MNRE, MWTI, MOH, LTA
	Watershed Management Sub-total	\$1,530,000.00	\$34,815,745.00	\$35,279,320.00	\$26,142,915.00	\$28,792,827.50	\$126,560,807.50	
Activity 1.1.2 Improve water resources information monitoring data	1.1.2.1 Expand and Maintain the National Hydrometric Network through the establishment of additional rainfall, river, and groundwater level gauges.	\$40,000.00	\$40,000.00	\$40,000.00	\$40,000.00	\$40,000.00	\$200,000.00	MNRE - WRD/MET/MOF, Development Partners
	1.1.2.2 Improve monitoring network to receive near real-time information through upgrade of communication capability	\$230,000.00	\$230,000.00	\$230,000.00			\$690,000.00	MNRE - WRD/MET/NIWA
	1.1.2.3 Improve analysis of water resources information (surface and groundwater) through upgrade of information management systems and development of water resources products	\$50,000.00	\$90,000.00	\$90,000.00			\$230,000.00	MNRE - WRD/MET/SWA/NIWA
	1.1.2.4 Strengthen water resource quality monitoring through the development of Environmental Guidelines	\$50,000.00	\$50,000.00				\$100,000.00	MNRE - WRD/MET/PUMA/SWA/ MOH / SROS/ NIWA
	1.1.2.5 Improve water-related hazard (flood/drought) monitoring and information to inform early warning	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$50,000.00	MNRE - WRD/MET/NIWA
	1.1.2.6 Develop Drought Policy	\$50,000.00	\$50,000.00				\$100,000.00	MNRE - WRD/MET/SWA/ NIWA
	1.1.2.7 Improve and expand the River Ecosystem Health Monitoring Program	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$50,000.00	MNRE - WRD/Legal/PUMA
	Water Resources Monitoring Data Sub-total	\$440,000.00	\$480,000.00	\$380,000.00	\$60,000.00	\$60,000.00	\$1,420,000.00	
Activity 1.1.3 Increase compliance with water resources regulatory framework	1.1.3.1 Implement and enforce the National Water Resources Policy, Water Resource Management Act, Allocation Policy, Upland Policy, regulations and village bylaws	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00	\$75,000.00	MNRE, SWA, OAG, MWCSO, Communities, NGOs
	1.1.3.2 Develop and Implement the National Water Resources Management Plan (Composite Plan)	\$75,000.00	\$75,000.00				\$150,000.00	MNRE, SWA, MWCSO, MOF, MAF, MOH
	1.1.3.3 Ongoing administration of the Water Abstraction Licensing Scheme (Fees & Charges)	\$13,000.00	\$13,000.00	\$13,000.00	\$13,000.00	\$13,000.00	\$65,000.00	MNRE-WRD/DEC/Legal/SWA MNRE-WRD
	1.1.3.4 Provide secretariat functions to the Water Resources Technical Committee and Water Resources Management Board	\$10,080.00	\$10,080.00	\$10,080.00	\$10,080.00	\$10,080.00	\$50,400.00	MNRE, SWA, MWCSO, MOF, MAF, MOH
	1.1.3.5 Ongoing monitoring and evaluation of policies and plans	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$50,000.00	MNRE, MWCSO, MOF, IWSA
	1.1.3.6 Develop new partnerships with NGOs/CSOs for effective and sustainable water resources management	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$10,000.00	MNRE - WRD/LMD/FOR/DEC, Development Partners
	1.1.3.7 Develop a pilot for Payments for Ecosystem services in relevant watershed areas with SMSMCL and other programs	\$75,000.00	\$75,000.00				\$150,000.00	MNRE, SWA, IWSA, MWCSO, MOF, MAF, MOH
	1.1.3.8 Conduct effective awareness and educational programmes such as radio talk backs, tv advertisements, World Water Day, displays etc.	\$40,000.00	\$40,000.00	\$40,000.00	\$40,000.00	\$40,000.00	\$200,000.00	MNRE, SWA, IWSA, MWCSO, MOF, MAF, MOH, MCIL
	1.1.3.9 Promote and Strengthen community driven watershed conservation and rehabilitation through consultations, nurseries and replantings, as well as Green Works and Green Jobs etc.	\$35,000.00	\$35,000.00	\$35,000.00	\$35,000.00	\$35,000.00	\$175,000.00	MAF PPCD/FAO/SPC MNRE SWA
	1.1.3.10 (ref ASP 4.1.4) Develop and promulgate an agriculture water use strategy to cover, farm household water management, small scale water irrigation systems, water for farm processing, water for livestock including fish farming and waste water management		\$50,000.00				\$50,000.00	
	Water Resources Policy and Regulatory Framework Sub-total	\$275,080.00	\$325,080.00	\$125,080.00	\$125,080.00	\$125,080.00	\$975,400.00	
	Grand total	\$2,245,080.00	\$35,620,825.00	\$35,784,400.00	\$26,327,995.00	\$28,977,907.50	\$128,956,207.50	

Table 22: ESPO 1.1 : MTEF 2017-2021.

ESPO 1.1 MTEF						
NESP Period	Recurrent	Investment	Secured		Shortfall	
			Recurrent	Investment	Recurrent	Investment
2016/17	\$962,255.00	\$3,869,229.00	\$962,255.00	\$3,869,229.00	\$0.00	\$0.00
2017/18	\$962,255.00	\$40,107,295.00	\$962,255.00	\$40,107,295.00	\$0.00	\$0.00
2018/19	\$962,255.00	\$38,161,209.00	\$962,255.00	\$38,161,209.00	\$0.00	\$0.00
2019/20	\$962,255.00	\$30,487,304.00	\$962,255.00	\$30,487,304.00	\$0.00	\$0.00
2020/21	\$962,255.00	\$32,841,716.50	\$962,255.00	\$32,841,716.50	\$0.00	\$0.00
SUB-TOTAL	\$4,811,275.00	\$145,466,753.50	\$4,811,275.00	\$145,466,753.50	\$0.00	\$0.00
TOTAL	\$150,278,028.50		\$150,278,028.50		\$0.00	

Table 23: ESPO 1.1 : Performance Management Framework 2017-2021.

ESPO 1.1	Output	Performance Indicator	Target	Baseline (2015/16)	Means of Verification	Assumptions	Responsible IA
Activity 1.1.1 Strengthen sustainable management of prioritised watershed areas	Watershed management plans developed (1.1.1.1-2)	Number of WMPs developed	3 WMPs per year	5 WMPs	WMP Documents	• Community engagement and ownership	MNRE - WRD
		Extent of implementation	10% annually	Existing to be consolidated	Sector/Division Progress Reports	• Availability of resources • Institutional capacity	MNRE - WRD
	Degraded watershed areas rehabilitated (1.1.1.3-5/1.1.3.7/1.1.3.9)	Cumulative hectares of prioritised watershed areas rehabilitated/ declared reserves	20 ha annually	280 ha	Sector /Division Progress Reports and Map	• Community engagement/ ownership • Availability of resources	MNRE - WRD
	River Ecosystem Health Monitoring Program (1.1.2.7)	Number of Rivers targeted	4 rivers annually	4 rivers	Sector /Division Progress Reports	• Community engagement • Availability of resources	MNRE - WRD
	Integrated Flood Management measures implemented (1.1.1.6-7)	Number of ecosystem responses implemented within Vaisigano Basin	5 annually	Nil	Sector / Division Progress Reports	• Timely disbursement of project funds • Existing capacity to implement	MNRE - WRD /DEC/FOR NGOs
		Vaisigano River Protection wall constructed	Constructed by end of NESP period	Nil	Sector and Project Progress Reports	• Timely disbursement of funds • Timely procurement	MNRE - WRD/DMO MWTI
		Falefa River Protection Wall constructed	1 River wall by end of 2017/18	Nil	Civil Works Report	• Timely procurement • Community engagement	MNRE - WRD/ DMO, MWTI
Activity 1.1.2 Improve water resources information and monitoring data	Monitoring Boreholes drilled and monitored (1.1.2.1)	Number monitoring boreholes drilled	1 borehole per year	15	Sector Progress Reports, maps and database	• Availability of drilling rig	MNRE - WRD MNRE - MET SWA
	Potentiometric map updated (1.1.2.3)	Percentage of map updated	2% annually	18%	Potentiometric Map	• Availability of drilling rig • Availability of resources	MNRE - WRD / MET
	Telemetry system operational (1.1.2.2)	Number of telemetry systems installed	5 annually	5	Sector Progress Report and Map	• Timely procurement of works	MNRE - WRD / MET
	Water resources quality monitoring guidelines developed (1.1.2.4-5)	Environmental Guidelines developed	By end of 2018/19	Nil	Environmental Guidelines document	• Availability of resources • Timely procurement of services	MNRE - WRD
	Drought Policy developed (1.1.2.6)	Drought Policy developed	By end of 2017/18	Nil	Drought Policy document	• Availability of resources • Timely procurement	MNRE - WRD

Continuation of Table 23: ESPO 1.1 : Performance Management Framework 2017-2021

ESPO 1.1	Output	Performance Indicator	Target	Baseline (2015/16)	Means of Verification	Assumptions	Responsible IA
Activity 1.1.3 Increase compliance with water resources regulatory framework	Regulatory tools in place and implemented (1.1.3.1-3/1.1.3.5)	Extent of policies, regulations and Village Bylaws implemented	5% annually	Existing to be established	Sector Progress Reports	• Availability of resources • Existing capacity to implement plans	MNRE - WRD
		National Water Resources Management Plan developed	By end of 2017/18	Nil	National Water Resources Management Plan document	• Availability of resources • Timely procurement of technical services	MNRE - WRD
		Number of non-compliant activities	2 prosecutions annually	1 prosecution	Divisional Reports	• Availability of resources • Capacity to enforce	MNRE - WRD/LEGAL
		Number of water developments licensed and monitored	100%	45	Licences issued and monitoring/ inspection reports	• Water developers abide by conditions set out under the licences and permits	MNRE - WRD
		Number of drilling permits issued	1 permit p.a.	6	Database	• Developers apply for drilling permits	MNRE - WRD /MET/PUMA
		Number of Village Bylaws developed	2 Village Bylaws annually	2 Village Bylaws	Village Bylaw documents	• Community engagement/ ownership.	MNRE - WRD
		WRM Board meetings conducted (1.1.3.4)	Number of WR Board meeting conducted pa	4 quarterly meetings pa.	4 meetings 2015/16	Meeting minutes / documents	• Availability of Board Members
	Partnerships with CSOs/NGOs forged (1.1.3.6)	Number of Partnership MOUs signed with CSOs/NGOs	5 MOUs signed by end of NESP Period	1 MOU	Signed MOUs	• Community engagement • Availability of resources	MNRE - WRD
	Awareness programs implemented (1.1.3.8)	Number of programs conducted	5 programs pa	Ongoing	Awareness/Consu ltation Reports	• Community engagement • Availability of resources	MNRE - WRD
		Number of women consulted and involved in watershed planning	50% of participants are women pa	Existing to be consolidated	Reports Registration	• Community engagement	MNRE - WRD
	Agriculture Water Use Strategy developed (1.1.3.10)	Strategy developed	By end of 2017/18	Nil	Strategy document	• Availability of resources • Community engagement /ownership	MAF -CROPS

Table 24: ESPO 1.2 : Costed Action Plan 2017-2021.

Long Term Outcome (LTO) 1 - Sustainable Management and Development of Natural Resources and Environment Improved								
End of Sector Plan Outcomes (ESPO)	1.2 Sustainable management and development of forests improved							
ACTIVITIES	SUB-ACTIVITIES	YEAR AND COST OF IMPLEMENTATION SAMOAN TALA (\$AT)					TOTAL	IMPLEMENTING PARTNERS
		FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21		
Activity 1.2.1 Strengthen sustainable management of forests	1.2.1.1 Develop, implement and review Management Plans for National Parks and Community Conservation Areas	\$1,713,183.20	\$1,713,183.20	\$1,713,183.20	\$1,713,183.20	\$1,713,183.20	\$8,565,916.00	MNRE-FOR/DEC/LMD, local communities, SCS, GEF, UNDP
	1.2.1.2 Assess, establish and monitor community forestry programs registered (community woodlots, agroforestry, boundary planting, wind breaker).	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$100,000.00	MNRE - FOR local communities, NGO, business owners
	1.2.1.3 Implement and monitor nursery facilities and operations	\$9,650.00	\$9,650.00	\$9,650.00	\$9,650.00	\$9,650.00	\$48,250.00	MNRE - FOR
	1.2.1.4 Coordinate strategies to implement boundary demarcation surveys for two(2) National Parks		\$50,000.00	\$125,000.00	\$125,000.00	\$90,000.00	\$390,000.00	MNRE-FOR/LMD/TECH, Land owners, Donor
	1.2.1.5 Implement sustainable forest management initiatives in collaboration with local, regional and international partners	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00	\$75,000.00	MNRE-FOR, local community, MAF, MWCSO, NGO, donors
	1.2.1.6 Promote ecosystem based adaptation approach to sustainable forestry management		\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$200,000.00	MNRE-FOR, NGO, Local communities, donors
	1.2.1.7 Implement measures to increase protection of Samoa's forest resources from the impacts of climate change.	\$10,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$210,000.00	MNRE-FOR, local communities, donors, NGO
	1.2.1.8 Raise awareness of forestry issues and gain widespread support for a sustainable forest and resilient Samoa	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$125,000.00	MNRE-FOR, local communities, donors, NGO, Schools
	1.2.1.9 Develop a pilot program on Payment for Ecosystem Services for access to National Parks services in collaboration with partners		\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$20,000.00	MNRE-FOR, SCS, SMSMCL, landowners, NGOs
Sustainable Forest Management Sub-Total		\$1,792,833.20	\$1,937,833.20	\$2,012,833.20	\$2,012,833.20	\$1,977,833.20	\$9,734,166.00	
Activity 1.2.2 Strengthen research and development for sustainable management of forests	1.2.2.1 Conduct forestry researches and/or species trials	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00	\$75,000.00	MNRE-FOR, Local communities, Private Sector
	1.2.2.2 Conduct Market Analysis & Development Impact Assessment study on forestry resources	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$5,000.00	MNRE-FOR, Local communities, Private Sector, NUS
	1.2.2.3 Improve data collection on forestry research statistics	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$5,000.00	MNRE-FOR
	1.2.2.4 Effective coordination and implementation of World Wetlands Day and designate new Wetland of International Importance	\$20,000.00	\$35,000.00	\$35,000.00	\$35,000.00	\$35,000.00	\$160,000.00	MNRE-FOR, Local communities, Private Sector, NGO's, Schools, MAF, MoF, MWCSO, NUS
	1.2.2.5 Prepare and submit Samoa's National Report on the implementation of the Ramsar Convention on Wetlands		\$10,000.00			\$10,000.00	\$20,000.00	MNRE-FOR, Local communities, Private Sector, NGO's, Schools, MAF, MoF, MWCSO
	1.2.2.6 Assess current status of wetland areas and update list of wetlands of international importance for Samoa		\$100,000.00	\$100,000.00	\$100,000.00	\$100,000.00	\$400,000.00	Local communities, MNRE-FOR/DEC/WRD, MWCSO, NUS
Research and Development Sub-Total		\$37,000.00	\$162,000.00	\$152,000.00	\$152,000.00	\$162,000.00	\$665,000.00	
Activity 1.2.3 Improve planning and policy framework for sustainable management of forests	1.2.3.1 Develop and review Forestry Regulatory Frameworks for sustainable management of forest	\$66,000.00	\$20,000.00	\$10,000.00	\$5,000.00	\$5,000.00	\$106,000.00	MNRE, AG, PM
	1.2.3.2 Effective forestry planning and monitoring of forest resources management and operations	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$25,000.00	MNRE - FOR
	1.2.3.3 Maintain and update the Samoa Forest Resource Information System (SamFRIS)	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$50,000.00	MNRE - FOR
	1.2.3.4 Enforce compliance of forestry resources management policies and operations (forestry harvesting operations)	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$50,000.00	MNRE - FOR
	1.2.3.5 Coordinate, implement and monitor the National Two Million Trees planting Campaign - 2015 - 2020 to restore degraded forestry areas.	\$160,000.00	\$200,000.00	\$200,000.00	\$120,000.00	\$33,950.00	\$713,950.00	MAF, METI, WIBDI, STEC
	1.2.3.6 Forestry Board meetings arranged and conducted every two months to report on forestry updates	\$31,000.00	\$31,000.00	\$31,000.00	\$31,000.00	\$31,000.00	\$155,000.00	MAF, MCIL, MWCSO, MOF,
	1.2.3.7 Provide technical support to Forestry and MNRE projects and other relevant sectors	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - FOR
	1.2.3.8 Conduct public awareness programs on forestry resources management and development	\$30,000.00	\$30,000.00	\$30,000.00	\$30,000.00	\$30,000.00	\$150,000.00	MNRE-FOR /WRD/LMD/DEC
Planning and Policy Sub-Total		\$312,000.00	\$306,000.00	\$296,000.00	\$211,000.00	\$124,950.00	\$1,249,950.00	
Grand total		\$2,141,833.20	\$2,405,833.20	\$2,460,833.20	\$2,375,833.20	\$2,264,783.20	\$11,649,116.00	

Table 25: ESPO 1.2 : MTEF 2017-2021.

ESPO 1.2 MTEF						
NESP Period	Recurrent	Investment	Secured		Shortfall	
			Recurrent	Investment	Recurrent	Investment
2016/17	\$1,984,780.00	\$2,024,183.20	\$1,984,780.00	\$311,000.00	\$0.00	\$1,713,183.20
2017/18	\$1,984,816.00	\$2,268,183.20	\$1,984,816.00	\$345,000.00	\$0.00	\$1,923,183.20
2018/19	\$1,984,816.00	\$2,323,183.20	\$1,984,816.00	\$335,000.00	\$0.00	\$1,988,183.20
2019/20	\$1,984,816.00	\$2,238,183.20	\$1,984,816.00	\$250,000.00	\$0.00	\$1,988,183.20
2020/21	\$1,984,816.00	\$2,127,133.20	\$1,984,816.00	\$163,950.00	\$0.00	\$1,963,183.20
SUB - TOTAL	\$9,924,044.00	\$10,980,866.00	\$9,924,044.00	\$1,404,950.00	\$0.00	\$9,575,916.00
TOTAL	\$20,904,910.00		\$11,328,994.00		\$9,575,916.00	

Table 26: ESPO 1.2 : Performance Management Framework 2017-2021 (Part I).

ESPO 1.2	Outputs	Performance Indicator	Target	Baseline (2015)	Means of Verification	Assumptions	Lead IA(s)
Activity 1.2.1 Strengthen sustainable management of	Management Plans for National Parks and Community conservation areas developed (1.2.1.1)	No. of Management Plans developed/ reviewed and updated	2 MPs developed/ reviewed /updated pa	4 MPs	Management Plan documents	• Availability of Resources • Timely development of plans • Community engagement /ownership	MNRE - FOR
		Extent of Approved Management Plans implemented	2% annually	Existing to be consolidated	Divisional Progress Reports	• Availability of resources • Community engagement /ownership	MNRE - FOR
	Degraded forest areas replanted/ rehabilitated (1.2.1.1/1.2.1.3/ 1.2.1.7/1.2.1.9/ 1.2.3.5)	Cumulative hectares of degraded forest areas restored/rehabilitated/replanted	20 ha annually	Existing to be consolidated	Divisional Reports Updated forestry maps	• Community engagement • Availability of resources • No natural disasters	MNRE - FOR /TECH, MAF SCS
		Total number of seedlings produced in 5 forestry nurseries	3000 seedlings annually	Existing to be consolidated	Divisional Reports	• Availability of resources	MNRE - FOR
		2 million trees planted in 5 years from 2015 - 2020	250,000 trees planted annually	Existing to be consolidated	Divisional Reports	• Availability of resources • Strong collaboration • No natural disasters	MNRE - FOR / MAF
	Agro-forestry / woodlots programs implemented (1.2.1.2/6-7/9)	Hectares of agro-forested areas /woodlots registered and mapped	20 ha	Existing to be consolidated	Divisional Reports and Maps	• Community engagement • Collaboration between MNRE, MAF, WIBDI, SSFI	MNRE - FOR /MAF/WIBDI/SSFI
Activity 1.2.2 Strengthen research and development for sustainable management of forests		Number of Integrated Pest Management programs implemented.	2 programs p.a.	Existing to be consolidated	Divisional reports	• Availability of resources • Community engagement / ownership • Technical capacity exists	MAF WIBDI SSFI
	Trainings and workshops conducted for Farmers (1.2.1.6-7)	Number of trainings conducted	5 trainings conducted p.a.	5 trainings in FY2015/16	Divisional reports Training/Workshop reports	• Availability of resources • Community engagement • Availability of qualified trainers	MAF - CROPS WIBDI SSFI MNRE -FOR
		Number of Farmers trained	100 farmers p.a.	Existing to be consolidated	Division reports Training/Workshop reports	• Availability of Farmers • Availability of resources • Strong Collaboration	MAF - CROPS WIBDI SSFI MNRE - FOR
	Organic Farming Advisory Committee meetings conducted (1.2.1.6-7)	Number of Organic Farms certified	2 certified organic farms every 2 years	Existing to be consolidated	Division Reports Sector Progress Reports	• Technical capacity exists • Availability of resources	MAF -CROPS WIBDI MNRE - FOR

Continuation of Table 26: ESPO 1.2 : Performance Management Framework 2017-2021 (Part II)

ESPO 1.2	Outputs	Performance Indicator	Target	Baseline (2015)	Means of Verification	Assumptions	Lead IA(s)
	Forestry Development Research in available (1.2.2.1 - 1.2.2.6)	Number of research and species trials conducted	1 Research study p.a.	Existing to be consolidated	Divisional reports Research documents	• Availability of resources	MNRE - FOR
		Market analysis of forest resources developed	By end of 2019/20	Nil	Divisional reports Market analysis documents	• Availability of resources • Technical capacity exists	MNRE - FOR
		Forest statistics updated every 3 years	Every 3 years	Existing to be consolidated	Divisional Reports	• Availability of resources • Technical capacity exists	MNRE - FOR
		National Report on Ramsar Convention	Annual Report	National Report 2015	National Report on RAMSAR document	• Report submitted in a timely manner	MNRE - FOR
		Number of Wetlands registered and protected	2 wetlands p.a.	Existing to be consolidated	Divisional Reports List of Wetlands	• Availability of resources • Community engagement and ownership	MNRE - FOR
Activity 1.2.3 Improve planning and policy framework for sustainable management of forests	Forestry Regulatory framework developed and reviewed (1.2.3.1-2)	Forestry Regulations reviewed	By 2018/19	Nil	Review report	• Availability of resources	MNRE - FOR
		Number of non-compliance activities prosecuted	2 prosecutions p.a.	Nil	Divisional Reports	• Availability of resources to monitor and enforce • Capacity of enforcement officers	MNRE - FOR /LEGAL
	Awareness programs and consultations conducted (1.2.1.8/1.2.2.4/ 1.2.3.8)	Number of awareness programs and consultations conducted	5 awareness programs and consultations p.a.	10 programs/ consultations	Divisional reports Awareness and consultation reports	• Availability of resources • Community engagement /support	MNRE - FOR
		Commemoration of World Wetlands Day	Annually	World Wetlands Day 2015	Divisional reports	• Availability of resources	MNRE - FOR
	Forestry Board quarterly meetings conducted (1.2.3.6)	Number of quarterly meetings held annually	4 quarterly meetings	4 quarterly meetings in 2015/16	Meeting minutes Meeting documents	• Availability of members	MNRE - FOR

Table 27: ESPO 1.3a : Costed Action Plan 2017-2021 (PartI).

Long Term Outcome (LTO) 1 - Sustainable Management and Development of Natural Resources and Environment Improved								
End of Sector Plan Outcomes	1.3a Sustainable Management and Development of Lands Improved	Year and Cost of Implementation					TOTAL	IMPLEMENTING PARTNERS
ACTIVITIES	SUB-ACTIVITIES	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	SAMOAN TALA FY 2020/21		
Activity 1.3a.1 Strengthen sustainable management and development of lands	1.3a.1.1 Develop new and review existing national policies and mechanisms on land development activities (stalls, billboards, signages, reclamations, sandmining, and quarry-based mining) on government lands and road reserves.	\$20,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$60,000.00	MNRE - LMD
	1.3a.1.2 Develop new and review existing policies of other LMD sections such as on leasing both government and customary lands, and land registration and land		\$40,000.00	\$40,000.00			\$80,000.00	MNRE - LMD/WRD/DEC/ FOR /PUMA, Communities, NGOs
	1.3a.1.3 Daily administering and monitoring of land development activities (sandmining, reclamations, stalls, billboards, signages and quarry-land mining) on government lands and road reserves.	\$30,000.00	\$30,000.00	\$30,000.00	\$30,000.00	\$30,000.00	\$150,000.00	MNRE - LMD
	1.3a.1.4 UNCCD-SLM World Day - An annual day event for national commemoration of land & soils world wide	\$150,000.00	\$70,000.00	\$70,000.00	\$70,000.00	\$80,000.00	\$440,000.00	MNRE - LMD
	1.3a.1.5 Implementation of the GEF 5: SMSMCL Project 2014 - 2019							
	a. Development of new and/or review of existing Sustainable Development Village Plans (SDVPS) as the main vehicles for the sustainable management of degraded land areas through the implementation of rehabilitation and restoration pilots at the community levels.	\$300,000.00	\$800,000.00	\$500,000.00	\$300,000.00	\$100,000.00	\$2,000,000.00	MNRE - LMD, MWCS, Communities, NGOs
	b. Sustainable management of critical landscapes through the development and maintenance of 4 KBAs (central Savaii, Uafato-Tiavea, Falealupo & Apia Catchment Basin) as conservation areas.	\$300,000.00	\$300,000.00	\$200,000.00	\$200,000.00	\$100,000.00	\$1,100,000.00	MNRE - LMD/DEC/FOR, NGOs, Communities
	c. Strengthen the 'Land Tenure' management of all identified critical landscapes (both degraded and non-degraded lands) in both Savaii and Upolu beginning with the Apia Urban Catchment Area through the (a) update of the Land Tenure system for the whole of Samoa and (b) taking, through compulsory land acquisition, of identified critical landscapes as government reserve lands under the Taking of Land Act 1964 for public purposes through the compensation schemes.		\$100,000.00	\$100,000.00	\$300,000.00		\$500,000.00	MNRE - LMD / TECHNICAL
	d. Development of an overarching National Framework for Sustainable Landuse Management Policy in which shall first identify and second, bring all unsustainable landuse practices and developments on all types of land tenure and critical landscapes under stringent controls.	\$65,000.00	\$30,000.00	\$30,000.00			\$125,000.00	MNRE - LMD / PUMA
	e. Development of a Land Resource Management Act 2017 to integrate, harmonize and sustainably manage all existing land resource uses and land development activities and practices on critical landscapes	\$120,000.00	\$100,000.00				\$220,000.00	MNRE - LMD/LEGAL/DEC/FOR/WRD/ PUMA
	f. Implementation of Sustainable Agriculture on community and individual farm lands for capacity building purposes of all village farmers, landowners and land resource	\$300,000.00	\$500,000.00	\$400,000.00	\$500,000.00	\$300,000.00	\$2,000,000.00	MNRE - LMD/ FOR, MAF, NGOs, Communities
	g. Develop a full monitoring and evaluation framework through the application of GIS technology and tools for monitoring and reporting purposes	\$60,000.00	\$30,000.00				\$90,000.00	MNRE - LMD
	h. Develop an SLM database for capturing SLM information for purposes of feeding it into the MNRE centralized repository system known as the Data and Knowledge Information System (DKIS) as per developed under the Rio Convention Project	\$60,000.00	\$30,000.00				\$90,000.00	MNRE - LMD
	i. Introducing the Payment for Ecosystem Services (PES) and other schematic incentives as SLM practices on how best to manage/control the mix of different land developments/ landuses from impacting severely on natural resources from ridge to reef and, to engage engage the full support of local communities on their customary	\$1,250,000.00	\$500,000.00				\$1,750,000.00	MNRE - LMD / WRD/FOR / LEGAL / TECHNICAL
	j. Raising awareness through media compaign programmes for the REDD + National Strategy Framework.	\$80,000.00					\$80,000.00	MNRE - LMD / FOR ,Media
	k. Mainstreaming SLM into the current SDS and into all the relevant sector plans; Agriculture, Transport, Energy, Education, Environment Sector, Infrastructure.	\$30,000.00	\$30,000.00	\$30,000.00			\$90,000.00	MNRE - LMD, Sector Coordination Units
	l. Integration and implementation of the Agriculture sector plans on the SLM	\$500,000.00	\$1,000,000.00	\$1,000,000.00	\$1,000,000.00	\$500,000.00	\$4,000,000.00	MNRE - LMD/ENV. SECTOR, MAF
	Sub-total	\$3,265,000.00	\$3,570,000.00	\$2,410,000.00	\$2,410,000.00	\$1,120,000.00	\$12,775,000.00	

Continuation of Table 27: ESPO 1.3a : Costed Action Plan 2017-2021 (Part II).

Long Term Outcome (LTO) 1 - Sustainable Management and Development of Natural Resources and Environment Improved								
End of Sector Plan Outcomes (ESPO)	1.3a Sustainable Management and Development of Lands Improved							
ACTIVITIES	SUB-ACTIVITIES	Year and Cost of Implementation			SAMOAN TALA (SAT)		TOTAL	IMPLEMENTING PARTNERS
		FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21		
Activity 1.3a.1 Strengthen sustainable management and development of lands	1.3a.1.6 Implementation of the UNCCD Aligned NAP 2015 - 2020 to the UNCCD Ten-Years Strategy 2008-2018							UNCCD-Secretariat GEF-UNDP/GEF-UNEP
	a. Improving the living conditions of affected populations in urban and rural areas that are severely affected by land degradation and droughts (LDD) through sustainable diversified livelihood base and income generating from adoption of SLM		\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$40,000.00	MNRE - LMD/FOR, MWCSD, MAF, NGOs, Communities
	b. Improving conditions of priority affected landscapes and ecosystems including agricultural lands, catchment and key biodiversity areas (KBAs)	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$50,000.00	MNRE - LMD/DEC/FOR/DEC, NGOs, Communities
	c. Contribution to increasing global benefits through improving the preservation of unique/ endemic (threatened) species and ecosystems		\$50,000.00	\$50,000.00			\$100,000.00	MNRE - LMD/DEC/FOR, NGOs
	d. Increasing mobilization of individual, institutional and community resources for and increasing land productivity in priority affected populations		\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$200,000.00	MNRE-LMD/FOR, MAF, MWCSD, NGOs
	e. Increasing awareness of the country's population through the media and community outreach programmes and through effective influence on development planning processes and stakeholders to adequately address LDD related issues	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$250,000.00	MNRE - LMD
	f. Strengthening the creation of enabling environments that promotes solutions to combat land degradation and to mitigate the effects of droughts.	\$30,000.00	\$30,000.00	\$30,000.00	\$30,000.00	\$30,000.00	\$150,000.00	MNRE - LMD / LEGAL, OAG
	g. Scientific and technical knowledge of LDD issues is widely disseminated and used by affected populations and national stakeholders to address LDD issues.		\$30,000.00	\$50,000.00	\$30,000.00	\$50,000.00	\$160,000.00	MNRE - LMD
	h. Capacity gaps and needs of national stakeholders and affected populations for addressing LDD issues are addressed through capacity building initiatives and educational programmes.		\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$200,000.00	MNRE - LMD/CORP. SERVICES
	i. Developing of an Integrated Investment Framework (IIF) for Samoa to ensure the sustainability of financial resources to facilitate access to technology and the continual availability of relevant technical expertise and support services to combat				\$50,000.00	\$50,000.00	\$100,000.00	MNRE - LMD
	1.3a.1.7 Samoa's national reporting through the online PRAIS portal to UNCCD Convention							
	a. Consistent submissions of Samoa's National Reports through the online PRAIS portal on a biannual basis (from 2010, 2012 & 2014) to report on the national implementation of the UNCCD Ten-Years Strategy 2008-2018 by Samoa.	\$30,000.00					\$30,000.00	MNRE - LMD
	b. Submission of Samoa's national report to UNCCD through the PRAIS portal for 2016 (reporting on the 2014-2015 leg) however this reporting year is optional whereby countries are given the flexibility to submit either before the CRIC 15, 2016 or before the COP 13, 2017		\$30,000.00		\$30,000.00		\$60,000.00	MNRE - LMD
	1.3a.1.8 Implement the Land Degradation Neutrality (LDN) by year 2030 as per SDG 15 & 15.3							MNRE- LMD, Relevant Sector IAs
	a. Regional Inception Workshop to introduce the LDN Target Setting Programme (LDN-TSP) to UNCCD country Parties						\$0.00	
	b. National Inception Workshop to introduce the LDN TSP to national stakeholders by coordination of the UNCCD National Focal Point (NFP) and the LDN national	\$10,000.00				\$10,000.00	\$20,000.00	MNRE - LMD
	c. Procurement of the LDN national consultant to develop the LDN-TSP for Samoa	\$60,000.00	\$25,000.00	\$0.00		\$85,000.00	\$170,000.00	MNRE - LMD
	d. Development of the LDN TSP by the national consultant under the coordination and overseer of the UNCCD-NFP (MNRE)	\$60,000.00	\$25,000.00	\$0.00		\$85,000.00	\$85,000.00	MNRE - LMD
	e. Implementation of the LDN TSP once completed and become operational.			\$5,000,000.00	\$5,000,000.00	\$10,000,000.00	\$20,000,000.00	MNRE-LMD, Relevant Divisions, Sector IAs
	1.3a.1.9 (ref ASP 4.1.2) Strengthen MAF capacity to support development of organic farming in Samoa	\$350,000.00	\$300,000.00	\$300,000.00	\$300,000.00	\$300,000.00	\$1,550,000.00	MAF Crops/Livestock, WIBDI, SPC POETcom, MNRE (Land
	1.3a.1.10 (ref ASP 4.1.3) Strengthen capacity of all MAF extension staff to extend the principles of sustainable agricultural resource management and utilization of land capability and soil suitability assessment and integrated land use planning to plan farm developments	\$100,000.00	\$100,000.00	\$100,000.00	\$100,000.00	\$100,000.00	\$500,000.00	MAF Crops/Livestock, MNRE (Land Management /Forestry), SFA/FFI-SPC-USP
Sub-total		\$700,000.00	\$760,000.00	\$5,700,000.00	\$5,710,000.00	\$10,880,000.00	\$23,665,000.00	

Continuation of Table 27: ESPO 1.3a : Costed Action Plan 2017-2021 (Part III).

Long Term Outcome (LTO) 1 - Sustainable Management and Development of Natural Resources and Environment Improved								
End of Sector Plan Outcomes (ESPO)	1.3a Sustainable Management and Development of Lands Improved							
ACTIVITIES	SUB-ACTIVITIES	Year and Cost of Implementation SAMOAN TALA (SAT)					TOTAL	IMPLEMENTING PARTNERS
		FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21		
Activity 1.3a.2 Strengthen sustainable management of Government Lands	1.3a.2.1 Provide strategic plans and policy advice on all land issues pertaining to the efficient operations of all government lands.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - LMD / LEGAL
	1.3a.2.2 Responsible for the maintenance and updating of all government land leases database, including recurring and outstanding lease payments.	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$50,000.00	MNRE - LMD / ICT
	1.3a.2.3 Responsible for the filing system for all government lands records.	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$50,000.00	MNRE - LMD
	1.3a.2.4 Ensure all the approved government land leases documents are registered in the new land registration system with copies in files for records.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - LMD / LEGAL
	1.3a.2.5 Facilitate the taking of lands for public purposes and land developments on government lands using leasing and licensing mechanisms.	\$2,000,000.00	\$2,000,000.00	\$2,000,000.00	\$2,000,000.00	\$2,000,000.00	\$10,000,000.00	MNRE - LMD/ LEGAL/TECH/WRD/FOR, OAG,
	1.3a.2.6 Administration of leases for reclamations including registration.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - LMD
	1.3a.2.7 Responsible for the management of burial plots on government lands.	\$10,000.00	\$150,000.00	\$150,000.00	\$150,000.00	\$150,000.00	\$610,000.00	MNRE - LMD
	1.3a.2.8 Facilitate land exchanges between government lands and freehold lands and vice versa.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - LMD / LEGAL / TECH
	1.3a.2.9 Provide the Secretariat services to the Land Board (LB)	\$160,000.00	\$160,000.00	\$160,000.00	\$160,000.00	\$160,000.00	\$800,000.00	MNRE - LMD
	1.3a.2.10 Provide infrastructural/utility services for government leased lands.	\$1,000,000.00	\$2,000,000.00	\$2,000,000.00	\$2,000,000.00	\$2,000,000.00	\$9,000,000.00	MNRE - LMD / LEGAL , MWTL,
	1.3a.2.11 Monitor illegal land development activities on government leased lands and arrange Land Board site-inspections	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$100,000.00	MNRE - LMD / LEGAL
	1.3a.2.12 Review lease payments for all government land leases	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - LMD / CORP. SERVICES
	Sub-total	\$3,210,000.00	\$4,350,000.00	\$4,350,000.00	\$4,350,000.00	\$4,350,000.00	\$20,610,000.00	
Activity 1.3a.3 Strengthen management of customary land leases	1.3a.3.1 Facilitate the role of government as the trustee of customary lands between the lessees (individuals/companies/investors) and the lessor (the government) acting on behalf of the landowners	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - LMD/LEGAL
	1.3a.3.2 Provide strategic advice and quality information to support development of customary lands	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$50,000.00	MNRE - LMD/LEGAL
	1.3a.3.3 Implement timely inspection and monitoring of proposed, current and expired leases with reference to their purposes, terms and conditions and, terminations.	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$100,000.00	MNRE - LMD/LEGAL
	1.3a.3.4 Collaborate with financial institutions in Samoa concerning mortgages of customary leases in terms of providing relevant information regarding lease conditions.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - LMD/LEGAL, OAG, Financial Institutions
	1.3a.3.5 Facilitate the administration of leasing processes up to registration	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - LMD
	1.3a.3.6 Maintain the effective operations and protection of record management processes	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$50,000.00	MNRE - LMD / LEGAL
	1.3a.3.7 Facilitate and mediate disputes and resolutions between the landowners and the lessees	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - LMD / LEGAL
	1.3a.3.8 Facilitate the leasing process and mediate the receipt of payment of leases by the lessees as well as the release of fee payments to the landowners	\$10,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$90,000.00	MNRE - LMD / LEGAL
	1.3a.3.9 Update and maintain databases on transacting the payment of leases between the lessees and the lessor	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - LMD/LEGAL
	1.3a.3.10 Responsible for the five year term review of lease payments between the lessees and lessor	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - LMD / LEGAL
	1.3a.3.11 Monitor illegal leases and instigate legal procedures if do not comply with current legislation	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - LMD / LEGAL
	Sub-total	\$50,000.00	\$60,000.00	\$60,000.00	\$60,000.00	\$60,000.00	\$290,000.00	

Continuation of Table 27: ESPO 1.3a : Costed Action Plan 2017-2021 (Part IV).

Long Term Outcome (LTO) 1 - Sustainable Management and Development of Natural Resources and Environment Improved								
End of Sector Plan Outcomes (ESPO)	1.3a Sustainable Management and Development of Lands Improved							
ACTIVITIES	SUB-ACTIVITIES	Year and Cost of Implementation					TOTAL	IMPLEMENTING PARTNERS
		SAMOAN TAI A (\$AT)						
		FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21		
Activity 1.3a.4 Strengthen management of the land registration system for land ownership	1.3a.4.1 Maintain, secure and update current land registration records and	\$0.00	\$100,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$250,000.00	MNRE - LMD
	1.3a.4.2 Update and upkeep scanning and archiving of old land records and creating e-copies for preserving and conserving purposes not only for today but for the benefits of the future generations	\$0.00	\$30,000.00	\$30,000.00	\$30,000.00	\$30,000.00	\$120,000.00	MNRE - LMD
	1.3a.4.3 Conduct searches and queries on information concerning land registration matters	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$25,000.00	MNRE - LMD
	1.3a.4.4 Responsible for the release of computer folios confirming formal registration of land ownership (including plan & lot numbers) and the registered	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$25,000.00	MNRE - LMD
	1.3a.4.5 Collaborate with MJCA through the Lands & Titles Division on disputed land matters by representing the Ministry in court cases concerning land title matters	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - LMD / LEGAL/TECH
	1.3a.4.6 Collaborate with Law Firms and other related Corporations in the administration of the Land Title Registration Act 2008 through the receiving of legal instruments for registration of legal interests on land property	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - LMD /LEGAL / TECH
	1.3a.4.7 Responsible for the registration of the Transfers of Title and other legal interests such as as Mortgage, Lease, Transmission, Caveat, Power of Attorney etc. in Computer Register Folio	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$50,000.00	MNRE - LMD / LEGAL
	1.3a.4.8 Responsible for the receiving and registration of new titles/folios created by new plans; (i) Definition plan (Court Grant), (ii) Redefinition plan (iii) Subdivision plan (iv) Leased Plans (Customary Lands, Reclamation Lands)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - LMD / LEGAL
	1.3a.4.9 Responsible for the implementation of the Land Title Registration system (Torren system) and the monitoring of the new Computerizing system (SOLA) currently operating the registration of land titles in Samoa	\$6,000.00	\$30,000.00	\$30,000.00	\$30,000.00	\$30,000.00	\$126,000.00	MNRE - LMD / LEGAL
	1.3a.4.10 Converting all land titles and the whole of land-related information from bound register to computer register	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - LMD
	1.3a.4.11 Develop a framework to capture the accuracy of Samoa's current land tenure; (i) Customary land (ii) Freehold Land (iii) Government Land	\$30,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$230,000.00	MNRE - LMD / LEGAL
	1.3a.4.12 Implementation of the Unit Title Registration	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$50,000.00	MNRE - LMD / LEGAL
	Sub-total	\$66,000.00	\$240,000.00	\$190,000.00	\$190,000.00	\$190,000.00	\$876,000.00	
Activity 1.3a.5 Strengthen management of the land valuation system and administration of stamp duty	1.3a.5.1 Regulate valuation services and practices of the Land Valuation profession	\$10,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$90,000.00	MNRE - LMD, Private Sector
	1.3a.5.2 Administer the stamp duty system for all land dealings in Samoa.	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$25,000.00	MNRE - LMD, Private Sector
	1.3a.5.3 Provide secretariat services to the Land Valuation Committee which is a statutory body responsible primarily for regulating the valuation practices of the Land Valuation profession.	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$100,000.00	MNRE - LMD, Private Sector
	Sub-total	\$35,000.00	\$45,000.00	\$45,000.00	\$45,000.00	\$45,000.00	\$215,000.00	
Activity 1.3a.6 Provide Administration services to the Land Commission	1.3a.6.1 Provide secretariat and related services to the Land Commission.	\$80,000.00	\$80,000.00	\$80,000.00	\$80,000.00	\$80,000.00	\$400,000.00	MNRE - LMD
	1.3a.6.2 Responsible for searches of land records and related information on Land Commission cases.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - LMD
	1.3a.6.3 Responsible for receiving and filing of Land Commission cases and advise the Secretary of the Land Commission	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - LMD
	Sub-total	\$80,000.00	\$80,000.00	\$80,000.00	\$80,000.00	\$80,000.00	\$400,000.00	
Activity 1.3a.7 Provide administration services to the Customary Land Advisory Committee (CLAC)	1.3a.7.1 Provide secretariat services to the CLAC	\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00	\$375,000.00	MNRE - LMD
	1.3a.7.2 Facilitate and coordinate national and local consultations for the CLAC on the economic use of customary lands.	\$35,000.00	\$35,000.00	\$38,494.00	\$38,494.00	\$38,494.00	\$185,482.00	MNRE - LMD / LEGAL, OAG, MWCS, Communities
	1.3a.7.3 Develop and promote a marketing strategy for customary lands.	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$100,000.00	MNRE - LMD / LEGAL
	1.3a.7.4 Develop effective policies for the economic use of customary lands through the leasing mechanism.	\$30,000.00	\$30,000.00	\$0.00	\$0.00	\$0.00	\$60,000.00	MNRE - LMD / LEGAL
	Sub-total	\$160,000.00	\$160,000.00	\$133,494.00	\$133,494.00	\$133,494.00	\$720,482.00	
	Grand total	\$7,566,000.00	\$9,265,000.00	\$12,968,494.00	\$12,978,494.00	\$16,858,494.00	\$59,636,482.00	\$0.00

Table 28: ESPO 1.3a : MTEF 2017-2021.

ESPO 1.3a MTEF						
NESP Period	Recurrent	Investment	Secured		Shortfall	
			Recurrent	Investment	Recurrent	Investment
2016/17	\$5,475,582.00	\$3,855,000.00	\$4,899,076.00	\$3,445,000.00	\$576,506.00	\$410,000.00
2017/18	\$7,339,582.00	\$4,190,000.00	\$5,399,076.00	\$3,830,000.00	\$1,940,506.00	\$360,000.00
2018/19	\$6,513,076.00	\$7,970,000.00	\$4,649,076.00	\$2,610,000.00	\$1,864,000.00	\$5,360,000.00
2019/20	\$6,473,076.00	\$8,020,000.00	\$4,649,076.00	\$2,160,000.00	\$1,824,000.00	\$5,860,000.00
2020/21	\$5,973,076.00	\$11,900,000.00	\$4,149,076.00	\$1,540,000.00	\$1,824,000.00	\$10,360,000.00
SUB-TOTAL	\$31,774,392.00	\$35,935,000.00	\$23,745,380.00	\$13,585,000.00	\$8,029,012.00	\$22,350,000.00
TOTAL	\$67,709,392.00		\$37,330,380.00		\$30,379,012.00	

Table 29: ESPO 1.3a : Performance Management Framework 2017-2021 (Part I).

ESPO 1.3a	Outputs	Performance Indicator	Target	Baseline (2015)	Means of Verification	Assumptions	Lead IA(s)
Activity 1.3a.1 Strengthen sustainable management and development of lands	Policy and Legislative framework strengthened (1.3a.1.1/1.3a.1.5-d,e/1.3a.1.6-f)	National Policy on Sustainable Landuse developed	By end of 2018/19	New	Policy document	- Availability of resources - Timely procurement of technical assistance	MNRE - LMD
		Land Resource Management Act 2017 developed	By end of 2017/18	New	Legislation document	- Availability of resources - Timely procurement	MNRE - LMD
	Land development activities regulated 1.3a.1.2/1.3a.2.11/1.3a.3.11	Number of land development activities regulated	Number of sand mining operations approved pa	Existing to be consolidated	Division monitoring reports Database	- Availability of resources - Developers apply for permits and abide by conditions	MNRE - LMD / PUMA
			Number of Reclamations approved pa	Existing to be consolidated	Division monitoring reports Database	- Institutional capacity - Developers apply for permits and abide by conditions	MNRE - LMD / PUMA
			Number of Land mining (quarries) approved pa	Existing to be consolidated	Division monitoring reports Database	- Institutional capacity - Developers apply for permits and abide by conditions	MNRE - LMD / PUMA
	Awareness / educational programs implemented (1.3a.1.4/1.3a.1.5-j/1.3a.1.6-e,g,h)	Commemoration of UNCCD/SLM Day	Annual	New	Division reports	Availability of resources	MNRE - LMD
		(LDD programs conducted	(LDD) programs conducted	New	Awareness/ Consultation Reports	Availability of resources	MNRE - LMD
	Sustainable Development Village Plans developed (1.3a.1.5-a)	Number of plans developed	4 SDV Plans	New	SDVP Documents	- Community engagement - Timely procurement	MNRE - LMD
	Critical landscapes restored 1.3a.1.5-b,c,i/1.3a.1.6-b,c,e	Identified critical landscapes restored	By end of 2018/19	Existing to be consolidated	Division reports Maps	- Community engagement - No natural disasters	MNRE - LMD
		Payment for Ecosystem Services (PES)	Total area of reserve by end of 2018/19	Existing to be consolidated	Division progress reports Map	- Community engagement - Availability of resources - Timely negotiation process	MNRE - LMD
		Threatened species and ecosystems preserved	Threatened species and ecosystems preserved	Existing to be consolidated	Division reports Biorapid surveys	- Community engagement - Availability of resources	MNRE - LMD/DEC/FOR
	Sustainable agriculture programs implemented (1.3a.1.5-f/1.3a.1.6-a,d)	Number of Farmers trained	Number of SLM trained Farmers pa.	Existing to be consolidated	Training reports	- Community engagement - Availability of Farmers	MNRE - LMD /FOR, MAF
		Number of Farmers adopting SLM practices/ technologies	Number of Farmers adopting SLM practices / technologies	Existing to be consolidated	Division progress reports	- Availability of resources - Capacity to adopt SLM practices & technologies	MNRE - LMD

Continuation of Table 29: ESPO 1.3a : Performance Management Framework 2017-2021 (Part II).

ESPO 1.3a	Outputs	Performance Indicator	Target	Baseline (2015)	Means of Verification	Assumptions	Lead IA(s)
Activity 1.3a.1 Strengthen sustainable management and development of lands	National Report to UNCCD developed (1.3a.1.7 - a, b)	Annual submission of National Report to UNCCD	UNCCD National Report	UNCCD National Report 2015	National Report document	Timely preparation and submission of report to UNCCD	MNRE - LMD
	Land Degradation Neutrality (LDN) implemented (1.3a.1.8 c, d)	Inception Workshop conducted	By end of 2020/21	New	LDN Inception Report	Availability of resources	MNRE - LMD
		Development of LDN TSP	By end of 2020/21	New	LDN TSP Report	- Availability of resources - Timely procurement	MNRE - LMD
	A fully operational organic farming unit in MAF with appropriate skills and resources to better support development of organic farming (1.3a.1.9) ASP 4.1.2)	Organic Farming Unit established	By end of 2018/19	New	MAF Corporate Organisational Structure PSC Approval	- Availability of resources - Timely recruitment of staff - Existing capacity	MAF - CROPS
	MAF extension staff and other providers have improved capacity to train farmers and rural communities and extend information to promote sustainable farming practices and land use (1.3a.1.10 ref ASP 4.1.3)	Number of extension staff and providers trained	Extension staff and providers trained annually	Existing to be consolidated	Training Reports Division progress reports	Availability of resources	MAF - CROPS MNRE - FOR/ LMD /DEC/WRD WIBDI/SSFI
		Number of farmers and rural communities trained	Farmers and rural communities trained annually	Existing to be consolidated	Training reports	- Availability of resources - Collaboration with Farmers and providers	MAF - CROPS MNRE-FOR/ LMD/ DEC/WRD WIBDI/SSFI
Activity 1.3a.2 Strengthen sustainable management of Government Lands	Updated land lease information available (1.3a.2.1/1.3a.2.3-4/6/8)	Database, records updated regularly	Monthly updates	To be confirmed	Database monthly updates	Capacity to update database and records	MNRE - LMD
		Registration of land leases (including reclamations)	Number of land leases registered annually	Existing to be consolidated	Division progress reports	Capacity to register 100% of land lease agreements	MNRE - LMD
	Lease payments collected and updated (1.3a.2.2/1.3a.2.12)	Timely collection of lease payments	100% of lease payments collected pa	Existing to be consolidated	Cash Receipts MOF Budget Reports	Capacity to collect 100% of lease payments owed	MNRE - LMD /CSU
	Land taken for public purposes (1.3a.2.5)	Total area of land reserved	Total area of land reserved	Existing to be consolidated	MOF Budget Review Reports	- Availability of resources - Timely negotiation process	MNRE - LMD /LEGAL MOF
	Burial plots on Government Lands managed and maintained (1.3a.2.7)	Number of burial plots allocated pa	Burial plots sold/allocated pa	Existing to be consolidated	MOF Budget Review reports	Increased use of public cemeteries	MNRE - LMD
		Maintenance of graveyards	Annually	Ongoing	Contracts	Availability of resources	MNRE - LMD
	Regular meetings of the Land Board held 1.3a.2.9	Number of Land Board meeting pa	4 meetings pa	Existing to be consolidated	Meeting minutes and documents	Availability of members	MNRE - LMD

Continuation of Table 29: ESPO 1.3a : Performance Management Framework 2017-2021 (Part III)

ESPO 1.3a	Outputs	Performance Indicator	Target	Baseline (2015)	Means of Verification	Assumptions	Lead IA(s)
Activity 1.3a.3 Strengthen management of customary land leases	Customary land leases managed effectively (1.3a.3.1 - 10)	Number of lease applications approved	Customary land leases approved pa	Existing to be consolidated	Division progress reports	Community ownership and consensus	MNRE - LMD
Activity 1.3a.4 Effective Management of the Land Registration System	Instruments registered and approved under the Land Titles Registration Act 2008 (1.3a.4.6/9/10)	Number of instruments registered and approved pa	Instruments registered and approved	Existing to be consolidated	Division progress reports	100 In compliance with Land Titles Registration Act 2008	MNRE - LMD
	Land registration records and information updated (1.3a.4.1 - 4/7-12)	Number of searches conducted pa	Land registration records updated	Existing to be consolidated	Division progress reports	Records on land registration are updated regularly	MNRE - LMD
	Court cases on land disputes attended to (1.3a.4.5)	Number of court cases on land disputes pa	Land disputes addressed pa	Existing to be consolidated	Division progress reports Court rulings	- Availability of evidence - Timely facilitation of land disputes	MNRE - LMD MJCA
Activity 1.3a.5 Effective Management of the Land Valuation Profession and Practice	Valuation of lands executed (1.3a.5.1)	Number of land valuations conducted pa	Land valuations conducted	Existing to be consolidated	Division progress reports	Timely execution of land valuations	MNRE - LMD
	Stamp duty collected (1.3a.5.2)	Total collected pa	Stamp duty collected	Existing to be consolidated	Division reports MOF Budget Reviews	Existing capacity to collect stamp duty	MNRE - LMD
	Land Valuation Committee meetings conducted (1.3a.5.3)	Meetings conducted pa	Regular meetings of the Land Valuation Committee	Existing to be consolidated	Meeting minutes and documents	Availability of members	MNRE - LMD
Activity 1.3a.6 Provide administration services to the Land Commission	Secretariat support to Land Commission provided (1.3a.6.1-3)	Meetings conducted pa	Land Commission meetings pa	Existing to be consolidated	Meeting minutes and documents	Availability of members	MNRE - LMD MJCA
Activity 1.3a.7 Provide administration services to the Customary Land Advisory Committee (CLAC)	Secretariat support to CLAC provided (1.3a.7.1)	Meetings conducted pa	CLAC meetings pa	Existing to be consolidated	Meeting minutes and documents	Availability of members	MNRE - LMD
	Economic use of customary lands promoted (1.3a.7.2)	Number of consultations conducted pa	Consultations conducted	Existing to be consolidated	Consultation Reports Division Progress Reports	- Availability of resources - Community engagement / ownership	MNRE - LMD
	Marketing Strategy for Economic use of Customary Lands developed (1.3a.7.3)	Marketing Strategy developed	By end of 2018/19	New	Marketing Strategy Document	- Availability of resources - Timely procurement of technical assistance	MNRE - LMD
	Policies for economic use of customary lands developed (1.3a.7.4)	Policy developed	By end of 2018/19	New	Policy document	- Availability of resources - Timely procurements of technical assistance	MNRE - LMD

Table 30: ESPO 1.3b : Costed Action Plan 2017-2021.

Long Term Outcome (LTO) 2 - More Sustainable and Resilient Built Environment								
End of Sector Plan Outcomes (ESPO)	1.3b Spatial information and technical services to support sustainable land developments improved	YEAR AND COST OF IMPLEMENTATION					TOTAL	IMPLEMENTING PARTNERS
ACTIVITIES	SUB-ACTIVITIES	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21		
Activity 1.3b.1 Provide quality Cadastral Information	1.3b.1.1 Scan approved survey plans, compile plans, residue plans, traverse books, field books, survey reports for updating of Registration System .	\$10,000.00	\$10,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$80,000.00	MNRE - TECH
	1.3b.1.2 Update T drive for safe keeping of land records.	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$50,000.00	MNRE - TECH
	1.3b.1.3 Update and upgrade of SOLA system	\$10,000.00	\$10,000.00	\$15,000.00	\$15,000.00	\$15,000.00	\$65,000.00	MNRE - TECH/ICT
	1.3b.1.4 Examine and review survey plans	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$50,000.00	MNRE - TECH, Private Survey Firms
	1.3b.1.5 Examine and review Unit Title Plans against Unit Title Act 2009	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - TECH
	1.3b.1.6 Work closely with PUMA to facilitate Development Consent Approvals	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$25,000.00	MNRE - TECH / PUMA
	Cadastral Information Sub-total	\$45,000.00	\$45,000.00	\$60,000.00	\$60,000.00	\$60,000.00	\$270,000.00	
Activity 1.3b.2 Facilitate Land surveys in line with the Survey Act 2010	1.3b.2.1 Monitor and review surveys executed by Private Survey Firms, Land Commission, Land Board & enquiries by general public, etc..	\$10,000.00	\$10,000.00	\$12,000.00	\$12,000.00	\$12,000.00	\$56,000.00	MNRE - TECH, Private Survey Firms, Land Commission, Land Board
	1.3b.2.2 Extend Geodetic Control of Samoa [horizontal & Vertical Controls]	\$10,000.00	\$10,000.00	\$15,000.00	\$15,000.00	\$15,000.00	\$65,000.00	MNRE - TECH
	1.3b.2.3 Provide timely survey services for Government lands and MNRE Projects	\$10,000.00	\$10,000.00	\$12,000.00	\$12,000.00	\$12,000.00	\$56,000.00	MNRE - TECH, MNRE Divisions
	1.3b.2.4 Review Survey regulation and guidelines	\$2,000.00	\$2,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$19,000.00	MNRE - TECH / LEGAL, OAG , Private Survey Firms
	1.3b.2.5 Use GNSS (Global Navigation Satellite System) to improve accuracy of survey data collected	\$2,000.00	\$2,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$13,000.00	MNRE - TECH, Private Survey Firms
	1.3b.2.6 Issue Annual Practising Certificate	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$5,000.00	MNRE - TECH, Private Survey Firms
	1.3b.2.7 Attend to investigation and inspection survey cases as and when required	\$5,000.00	\$5,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$40,000.00	MNRE - TECH
	1.3b.2.8 Work closely with the Land Management Division to provide support services to the Land Commission and Land Board	\$5,000.00	\$5,000.00	\$8,000.00	\$8,000.00	\$8,000.00	\$34,000.00	MNRE - TECH / LMD
	1.3b.2.9 Upgrade survey equipment and capacity building for staff		\$5,000.00	\$50,000.00	\$150,000.00	\$250,000.00	\$455,000.00	MNRE - TECH
	Land Survey Sub-total	\$45,000.00	\$50,000.00	\$116,000.00	\$216,000.00	\$316,000.00	\$743,000.00	
1.3b.3 Provide effective and efficient mapping services	1.3b.3.1 Carry out investigation of geographic names of certain places to meet requirements of the Geographic Names Board.	\$5,000.00	\$5,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$40,000.00	MNRE - TECH
	1.3b.3.2 Draft Regulations as required under the SIA Act 2010		\$10,000.00	\$50,000.00	\$50,000.00		\$110,000.00	MNRE - TECH / LEGAL, OAG
	1.3b.3.3 Develop Guidelines as required under the SIA Act 2010.		\$10,000.00	\$20,000.00	\$30,000.00		\$60,000.00	MNRE - TECH
	1.3b.3.4 To provide support services by means of LIDAR information for MNRE, Stakeholders, and public	\$5,000.00	\$10,000.00	\$100,000.00	\$200,000.00	\$300,000.00	\$615,000.00	MNRE - TECH
	1.3b.3.5 Develop database for approved geographic names	\$5,000.00	\$5,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$70,000.00	MNRE - TECH
	1.3b.3.6 Provide secretariat functions to quarterly meetings of the Geographic Names Board	\$5,000.00	\$5,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$40,000.00	MNRE - TECH
	1.3b.3.7 Publish Geographic Names for public awareness	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$50,000.00	MNRE - TECH
	1.3b.3.8 Authorise the registration of qualified surveyors	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$15,000.00	MNRE - TECH
	1.3b.3.9 Promote high standards of professionalism to be observed by Land Professionals	\$2,930.00	\$2,930.00	\$5,000.00	\$5,000.00	\$5,000.00	\$20,860.00	MNRE - TECH, Private Survey Firms
	Spatial Information Sub-total	\$35,930.00	\$60,930.00	\$228,000.00	\$338,000.00	\$358,000.00	\$1,020,860.00	
	Grand total	\$125,930.00	\$155,930.00	\$404,000.00	\$614,000.00	\$734,000.00	\$2,033,860.00	

Table 31: ESPO 1.3b : MTEF 2017-2021.

ESPO 1.3b MTEF						
NESP Period	Recurrent	Investment	Secured		Shortfall	
			Recurrent	Investment	Recurrent	Investment
2016/17	\$921,261.00	\$4,000.00	\$857,261.00	\$0.00	\$64,000.00	\$4,000.00
2017/18	\$921,261.00	\$34,000.00	\$857,261.00	\$0.00	\$64,000.00	\$34,000.00
2018/19	\$959,331.00	\$244,000.00	\$857,261.00	\$0.00	\$102,070.00	\$244,000.00
2019/20	\$959,331.00	\$454,000.00	\$857,261.00	\$0.00	\$102,070.00	\$454,000.00
2020/21	\$964,331.00	\$569,000.00	\$857,261.00	\$0.00	\$107,070.00	\$569,000.00
SUB-TOTAL	\$4,725,515.00	\$1,305,000.00	\$4,286,305.00	\$0.00	\$439,210.00	\$1,305,000.00
TOTAL	\$6,030,515.00		\$4,286,305.00		\$1,744,210.00	

Table 32: ESPO 1.3b : Performance Management Framework 2017-2021.

ESPO 1.3a	Outputs	Performance Indicator	Target	Baseline (2015)	Means of Verification	Assumptions	Lead IA(s)
Activity 1.3b.1 Provide Quality Cadastral Information	Digitised and updated Cadastral Information (1.3b.1.1-3)	Number of approved survey plans digitised pa	Digitised survey plans pa	Existing to be consolidated	Division reports Cadastral Database	• Capacity to digitise cadastral information	MNRE - TECH
		T-Drive and SOLA System annual updates	Updated T-Drive and SOLA System	Existing to be consolidated	Division reports	• Capacity to manage SOLA • Availability of resources	MNRE - TECH
	Survey plans reviewed and approved (1.3b.1.4/5/6)	Number of Survey plans reviewed pa	Number of survey plans reviewed	Existing to be consolidated	Division reports	• Timely approval of survey plans	MNRE - TECH
		Number of Unit Title Plans approved	Unit Title Plans approved pa	Existing to be consolidated	Division reports	• Timely review and approval of survey plans	MNRE - TECH
Activity 1.3b.2 Facilitate Land Surveys in line with Survey Act 2010	Surveys executed in line with Survey Act 2010 (1.3b.2.1 - 5/7-8)	Number of Government surveys undertaken pa	Government surveys	Existing to be completed	Division reports	• Timely execution of surveys • Availability of resources • Community engagement	MNRE - TECH Private Survey Firms
		Number of surveys executed by the Private Sector pa	Private Sector surveys	Existing to be completed	Division reports	• Surveys comply with Survey Act 2010	MNRE - TECH
	Certified Land Survey Practitioners (1.3b.2.6/1.3b.3.8/9)	Number Annual Practising Certificates issued	Annual Practising Certificates issued	Existing to be consolidated	Division reports Certificates	• Land Surveyors adhere to requirements of the Survey Act 2010	MNRE - TECH
	Land survey capacity upgraded (1.3b.2.9)	Procurement of new survey equipments	By end of NESP period	New	Division reports	• Availability of Resources	MNRE-TECH
Activity 1.3b.3 Provide effective and efficient Mapping services	Geographic Names established (1.3b.3.1/5/7)	Number of determinations by the Board pa	Geographic names approved and published pa	Existing to be consolidated	Division Reports Publication of geographic names	• Timely approval of geographic names • Community engagement	MNRE - TECH
	Regulations required under the SIA Act in place (1.3b.3.2-3)	Regulations drafted	By end of 2019/20	New	Regulations document	• Availability of resources	MNRE - TECH
		Guidelines developed	By end of 2019/20	New	Guidelines document	• Availability of resources	MNRE - TECH
	Updated maps produced (1.3b.3.4)	Number of maps produced pa	Maps produced pa	Existing to be consolidated	Division progress reports	• Timely production of Maps	MNRE - TECH
		Number of high resolution maps developed	High resolution maps produced pa	Existing to be consolidated	Division progress reports	• Capacity to use the LiDAR • Availability of resources	MNRE - TECH
	Geographic Names Board quarterly meetings conducted (1.3b.3.6)	Number of meetings per year	4 meetings per year	Existing to be consolidated	Meeting minutes and documents	• Availability of members • Timely approval of geographic names	MNRE - TECH

Table 33: ESPO 1.4 : Costed Action Plan 2017-2021 (Part I).

Long Term Outcome (LTO) 1 - Protection and conservation of terrestrial biological diversity strengthened								
End of Sector Plan Outcomes (ESPO)	1.4 Protection and conservation of terrestrial biological diversity strengthened							
ACTIVITIES	SUB-ACTIVITIES	YEAR AND COST OF IMPLEMENTATION SAMOAN TALA (SAT)					TOTAL	IMPLEMENTING PARTNERS
		FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21		
Activity 1.4.1 Improve ecological conservation, protection and restoration of the terrestrial environment	1.4.1.1 Finalise Environmental Management and Conservation Bill	\$0.00	\$0.00				\$0.00	MNRE - DEC / LEGAL, OAG
	1.4.1.2 Develop management plan for Gataivai, FPAM project site.						\$0.00	
	1.4.1.3 Develop, review and implement species recovery and/or management plans to ensure the survival of critically endangered endemic terrestrial species.	\$50,000.00	\$50,000.00				\$100,000.00	MNRE - DEC/FOR/LMD, NGOs-SCS, DPs, Communities
	1.4.1.4 Acquire legal status for at least 2 existing and newly established terrestrial protected areas.		\$50,000.00			\$50,000.00	\$100,000.00	MNRE - DEC/FOR/LMD/ LEGAL/TECH, OAG, Communities
	1.4.1.5 Develop and implement management plans for at least 2 government managed terrestrial KBAs.		\$25,000.00	\$25,000.00			\$50,000.00	MNRE - DEC/FOR/LMD/WRD, NGOs, Communities, DPs
	1.4.1.6 Develop and endorse national legal policy framework for the Nagoya Protocol	\$20,000.00	\$40,000.00	\$40,000.00			\$100,000.00	MNRE - DEC/LEGAL, OAG
	1.4.1.7 Review and secure funding for the implementation of the the 2008 - 2011 National Invasive Species Action Plan (NISAP)		\$30,000.00				\$30,000.00	MNRE - DEC/FOR/LMD, NGOs, DPs, Communities
	1.4.1.8 Implement Samoa's Invasive Species Emergency Response Plan (SISERP) 2015-2020 in collaboration with relevant government agencies .		\$20,000.00		\$15,000.00	\$15,000.00	\$50,000.00	MNRE - DEC/DMO, NGOs, Communities, Sector IAs
	1.4.1.9 Encourage and support the establishment of new terrestrial protected areas (CCA, KBA,)				\$50,000.00	\$50,000.00	\$100,000.00	MNRE - DEC/FOR/LMD/ LEGAL , NGOs-SCS, Communities, DPs
	1.4.1.10 Conduct surveys to determine the status of freshwater biodiversity species.		\$25,000.00	\$25,000.00			\$60,000.00	MNRE - DEC/WRD
	1.4.1.11 Conduct ecological surveys on the taxonomic data gaps for the key selected sites identified under various projects.	\$30,000.00	\$30,000.00	\$30,000.00	\$30,000.00	\$30,000.00	\$150,000.00	MNRE - DEC/LMD/FOR, Communities, NGOs, DPs
	1.4.1.12 Conduct surveys to determine the status of threatened and vulnerable terrestrial species (manumea, maomao etc..)	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$50,000.00	MNRE - DEC/FOR, NGOs-SCS, Communities, DPs
	1.4.1.13 Promote and support ecotourism operations and other sustainable income-generating activities beneficial to the conservation of terrestrial species.		\$25,000.00			\$25,000.00	\$50,000.00	MNRE - DEC/LMD/FOR, STA, SHA, Communities, NGOs-SCS
	1.4.1.14 Strengthen educational and awareness programs on key terrestrial biodiversity issues such as Access to Benefit Sharing (ABS), Traditional Knowledge, Biosecurity etc	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$250,000.00	MNRE - DEC / LEGAL, MAF
	1.4.1.15 Ensure close coordination and cooperation with key agencies in the implementation of obligations	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - DEC, Sector IAs, Communities, NGOs-SCS
	1.4.1.16 Maintain collaboration with relevant organizations and participate in national/regional framework/approaches to prevent the introduction of invasive species.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - DEC/FOR, NGOs, Communities, DPs
	1.4.1.17 Provide basic training for village representatives in habitat and species monitoring and reporting.	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$100,000.00	MNRE - DEC/FOR, NGOs, Communities, DPs
	1.4.1.18 Conduct ecological/biodiversity studies and surveys for newly identified terrestrial protected areas			\$75,000.00		\$75,000.00	\$150,000.00	MNRE - DEC, NGOs, Communities, DPs
	1.4.1.19 Develop and maintain Invasive Species Database	\$10,000.00						MNRE - DEC
	1.4.1.20 (ref ASP 4.5.1) Deliver biosecurity public awareness programs	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$250,000.00	MAF, Local Media, MNRE-DEC
	1.4.1.21 (ref ASP 4.5.2) Run national simulation exercises	\$60,000.00	\$60,000.00	\$60,000.00	\$60,000.00	\$60,000.00	\$300,000.00	MAF, MNRE - DMO/DEC
	1.4.1.22 (ref ASP 4.5.3) Maintain boarder control and quarantine infrastructure	\$1,500,000.00	\$1,000,000.00	\$1,000,000.00	\$1,000,000.00	\$1,000,000.00	\$5,500,000.00	MAF/SPC-PHAMA
Terrestrial Conservation and Protection Sub-total		\$1,800,000.00	\$1,485,000.00	\$1,385,000.00	\$1,285,000.00	\$1,435,000.00	\$7,390,000.00	

Table 33: ESPO 1.4 : Costed Action Plan 2017-2021 (Part II).

Long Term Outcome (LTO) 1 - Protection and conservation of terrestrial biological diversity strengthened								
End of Sector Plan Outcomes (ESPO)	1.4 Protection and conservation of terrestrial biological diversity strengthened	YEAR AND COST OF IMPLEMENTATION					TOTAL	IMPLEMENTING PARTNERS
ACTIVITIES	SUB-ACTIVITIES	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21		
Activity 1.4.2 Strengthen management and maintenance of national reserves for ecological conservation purposes	1.4.2.1 Manage and maintain 21 National Reserves	\$164,000.00	\$164,000.00	\$164,000.00	\$164,000.00	\$164,000.00	\$820,000.00	MNRE - DEC, Sector IAs, NGOs, Communities, DPs
	1.4.2.2 Upgrade & renew existing facilities for all Reserves	\$90,000.00	\$30,000.00	\$20,000.00	\$10,000.00	\$10,000.00	\$160,000.00	MNRE - DEC, NGOs, Communities, DPs
	1.4.2.3 Establish fences for Lelata and Vaimauga Reserves	\$7,000.00		\$30,000.00			\$37,000.00	MNRE - DEC
	1.4.2.4 Redevelop/landscape the Vailima Botanical Garden to reflect variety of landuse values		\$40,000.00	\$40,000.00	\$20,000.00	\$20,000.00	\$120,000.00	MNRE - DEC
	1.4.2.5 Monitor reserves conditions and observe illegal activities	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$10,000.00	MNRE - DEC/FOR/LMD/WRD/LEGAL, Communities, NGOs
	1.4.2.6 Renovation & Extension of the National Reserves Office at Vailima	\$50,000.00	\$50,000.00	\$50,000.00	\$30,000.00	\$20,000.00	\$200,000.00	MNRE - DEC
	1.4.2.7 Manage Invasive species and restore areas with native species	\$74,304.00	\$74,304.00	\$74,304.00	\$74,304.00	\$74,304.00	\$371,520.00	MNRE - DEC/FOR, MAF, Communities, NGOs-SCS, DPs
	1.4.2.8 Collect, validate and update information on Protected Area Network of Samoa through the establishment of the Protected Area Steering Committee	\$2,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$22,000.00	MNRE - DEC/FOR/LMD WRD, Communities, DPs
	1.4.2.9 Development of nursery facility for propagation and raising of native seedling and wilding	\$2,000.00	\$25,000.00	\$20,000.00	\$10,000.00	\$10,000.00	\$67,000.00	MNRE - DEC/LMD/WRD/FOR
	1.4.2.10 Establish new reserves in Upolu and/or Savaii			\$25,000.00	\$25,000.00	\$25,000.00	\$75,000.00	MNRE - DEC/LMD/FOR/WRD
	1.4.2.11 Carry out biodiversity inventory survey for all reserves		\$5,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$35,000.00	MNRE - DEC/LMD/FOR, NGOs, Communities, DPs
	1.4.2.12 Mapping to proceed proclamation for all reserves		\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$20,000.00	MNRE - DEC/TECH/FOR/LMD, NGOs, DPs
	1.4.2.13 Review and update Reserves Management Plans		\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$20,000.00	MNRE - DEC, Sector IAs, Communities, DPs
	1.4.2.14 Develop & endorse management plans for Malololelei, Vaitele East and West		\$10,000.00	\$20,000.00	\$20,000.00	\$5,000.00	\$55,000.00	MNRE - DEC, Sector IAs, Communities, DPs
	1.4.2.15 Review and update Vailima Management plan*		\$4,000.00	\$22,000.00			\$26,000.00	MNRE - DEC, Sector IAs, Vailima community, DPs
	1.4.2.16 Develop and implement actions for Mt Vaea Trail Improvement	\$5,000.00	\$2,000.00	\$50,000.00	\$20,000.00	\$20,000.00	\$97,000.00	MNRE - DEC/FOR, NGOs, Communities, DPs
	1.4.2.17 Conduct awareness and educational campaigns for reserves and biodiversity	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$50,000.00	MNRE - DEC/FOR/LMD, NGOs, Communities, DPs
	1.4.2.18 Carry out visitor census surveys and educational tours	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$5,000.00	MNRE - DEC
	1.4.2.19 Establish Reserves Network Database	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$10,000.00	MNRE - DEC
	1.4.2.20 Engage and promote working in partnership with local communities and stakeholders to implement conservation actions, improve monitoring programs and strengthen enforcement on the ground	\$10,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$210,000.00	MNRE, NGOs, Communities
National Reserves Sub-total		\$409,304.00	\$434,304.00	\$555,304.00	\$413,304.00	\$388,304.00	\$2,410,520.00	
Grand Total		\$2,209,304.00	\$1,919,304.00	\$1,940,304.00	\$1,698,304.00	\$1,823,304.00	\$9,800,520.00	

Table 34: ESPO 1.4 : MTEF 2017-2021.

ESPO 1.4 MTEF						
NESP Period	Recurrent	Investment	Secured		Shortfall	
			Recurrent	Investment	Recurrent	Investment
2016/17	\$1,121,084.00	\$1,879,304.00	\$1,035,464.00	\$30,000.00	\$85,620.00	\$1,849,304.00
2017/18	\$1,107,084.00	\$1,643,304.00	\$1,065,524.00	\$90,000.00	\$41,560.00	\$1,553,304.00
2018/19	\$1,052,084.00	\$1,719,304.00	\$1,046,584.00	\$50,000.00	\$5,500.00	\$1,669,304.00
2019/20	\$1,052,084.00	\$1,477,304.00	\$1,046,584.00	\$10,000.00	\$5,500.00	\$1,467,304.00
2020/21	\$1,052,084.00	\$1,602,304.00	\$1,046,584.00	\$10,000.00	\$5,500.00	\$1,592,304.00
SUB-TOTAL	\$5,384,420.00	\$8,321,520.00	\$5,240,740.00	\$190,000.00	\$143,680.00	\$8,131,520.00
TOTAL	\$13,705,940.00		\$5,430,740.00		\$8,275,200.00	

Table 35: ESPO 1.4 : Performance Management Framework 2017-2021 (Part I).

ESPO 1.4	Outputs	Performance Indicator	Target	Baseline (2015)	Means of Verification	Assumptions	Lead IA(s)
Activity 1.4.1 Improve ecological conservation, protection and restoration of the terrestrial environment	Environment Management and Conservation Legislation in place (1.4.1.1)	EMC legislation passed by Parliament	By end of 2017/18	New	Legislative document	- Community support - Political support - Strong collaboration	MNRE - DEC/LEGAL OAG
	Gataivai Management Plan developed (1.4.1.2)	Management Plan developed	By end of 2016/17	New	Management Plan document	- Community engagement - Availability of resources	MNRE - DEC /FOR (FPAM)
	Species Recovery / Management Plans for critically endangered endemic terrestrial species in place (1.4.1.3 / 1.4.1.17)	Species Recovery / Management Plans reviewed and / or approved	By end of 2017/18	Existing to be consolidated	Recovery and / or Management Plans	- Availability of resources - Community engagement / ownership	MNRE - DEC
		Villagers trained on species monitoring and reporting	Annual trainings	Ongoing	Training reports	- Availability of resources - Community engagement	MNRE - DEC
	Protected Areas established (1.4.1.4-5/9/18)	Legal status for protected areas established achieved	By end of NESP period	1 Protected Area	Legal document Division progress reports	- Community engagement - Availability of resources - Timely negotiation processes	MNRE - DEC /LEGAL OAG
		2 Management Plans developed for 2 KBAs	By end of NESP Period	Existing to be consolidated	Management Plans Division reports	- Community engagement - Availability of resources - Institutional capacity	MNRE - DEC / LMD / FOR/WRD
		New protected areas established (CCA / KBAs)	By end of NESP period	Existing to be consolidated	Division progress reports MOUs	- Community engagement - Availability of resources - Institutional capacity	MNRE - DEC/FOR/LMD /WRD
		Ecological studies conducted for new KBAs	By end of NESP period	New	Ecological / Biodiversity reports	- Community engagement - Availability of resources - Institutional capacity	MNRE - DEC FOR/LMD/WRD NGOs
	National legal framework for Nagoya Protocol developed (1.4.1.6)	National legal framework developed	By end of 2018/19	New	Legal document Division progress reports	- Availability of resources - Community engagement - Political support	MNRE - DEC /LEGAL OAG
	NISAP reviewed (1.4.1.7)	NISAP reviewed	By end of 2017/18	Existing to be consolidated	NISAP review report Division reports	Availability of resources	MNRE - DEC
	SISERP 2015 - 2020 implemented (1.4.1.8)	Extent of SISERP implemented	100% by end of NESP period	Existing to be consolidated	SISERP Implementation Review Report	- Availability of resources - Community engagement - Strong collaboration	MNRE - DEC
	Status of freshwater biodiversity species established (1.4.1.10)	Status of freshwater biodiversity established	By end of 2018/19	New	Survey reports Division reports	- Availability of resources - Community engagement - Strong collaboration	MNRE - DEC / WRD

Continuation of Table 35: ESPO 1.4 : Performance Management Framework 2017-2021 (Part II).

ESPO 1.4	Outputs	Performance Indicator	Target	Baseline (2015)	Means of Verification	Assumptions	Lead IA(s)
Activity 1.4.1 Improve ecological conservation, protection and restoration of the terrestrial environment	Taxanomic data gaps for key selected sites identified (1.4.1.11)	Taxanomic data available	By end of NESP period	New	Ecological survey reports	• Availability of resources • Community engagement • Strong collaboration	MNRE - DEC / FOR
	Status of maomao, manumea established (1.4.1.12)	Status data available	By end of NESP Period	Existing to be consolidated	Survey reports	• Availability of resources • Community engagement	MNRE - DEC NGOs
	Ecotourism operations promoted (1.4.1.13)	Number of eco-tourism operations registered	By end of NESP period	Existing to be consolidated	Division reports Eco-tourism establishments	• Community engagement • Collaboration between partners	MNRE - DEC STA SHA
	Awareness and educational programs implemented (1.4.1.14/20/1.4.2.17-18)	Number programs conducted annually	Programs conducted annually	Ongoing	Awareness reports Division reports	• Availability of resources • Community engagement • Strong collaboration	MNRE - DEC MAF - Quarantine
	Partnerships established (1.4.1.15-16)	Number of partnerships established	By end of NESP period	Existing to be consolidated	Partnership MOUs	• Strong collaboration • Community engagement	MNRE - DEC NGOs, Communities
	Invasive species database developed (1.4.1.19)	Database developed	By end of 2016/17	New	Database records	• Institutional capacity	MNRE - DEC
	Simulation exercises conducted annually(1.4.1.21)	Simulation exercises conducted	Annual simulation exercises	New	Simulation reports	• Availability of resources	MAF - Quarantine MNRE - DEC / DMO
	Border control maintained 1.4.1.22	Quarantine infrastructure upgraded	By end of NESP period	Existing to be consolidated	Division progress reports	• Availability of resources	MAF -Quarantine
Activity 1.4.2 Strengthen management and maintenance of national reserves for ecological conservation purposes	National Reserves managed and maintained (1.4.2.1-5/8/12/16/19)	Proclamations for reserves issued	By end of NESP	21 Reserves	Proclamations issued	• Community engagement • Political support	MNRE - DEC/LMD, STA, Land Owners
		Existing facilities upgraded	By end of NESP period	Existing to be consolidated	Division progress Site visits	• Availability of resources	MNRE - DEC
		New facilities constructed	By end of NESP period	New	Division reports Site visits	• Availability of resources	MNRE - DEC
		Lelata and Vaimauga reserves fenced	By end of 2018/19	New	Division reports Site visits	• Availability of resources • Community engagement	MNRE - DEC
		Vailima Botanical Garden redeveloped	100% by end of NESP period	New	Division reports Site visits	• Availability of resources	MNRE - DEC

Continuation of Table 35: ESPO 1.4 : Performance Management Framework 2017-2021 (Part III).

ESPO 1.4	Outputs	Performance Indicator	Target	Baseline (2015)	Means of Verification	Assumptions	Lead IA(s)
Activity 1.4.2 Strengthen management and maintenance of national reserves for ecological conservation purposes		Number of illegal activities reported in reserves	Number of reports pa	Existing to be consolidated	Division progress reports	- Institutional capacity - Availability of resources - Community engagement	MNRE - DEC NGOs, Communities
		Reserves network database developed	By end of 2017/18	New	Division reports Database	- Availability of resources - Institutional capacity	MNRE - DEC
	Vailima National Reserves Office renovated (1.4.2.6)	Vailima Office renovated	By end of NESP period	New	Division reports Renovated Office	Availability of resources	MNRE - DEC
	Reserves restored with native species (1.4.2.7)	Total area of reserves restored with native species	Min. 20 ha pa	Existing to be consolidated	Division reports Maps	- Availability of resources - Community engagement	MNRE - DEC
	Nursery for native seedlings and wildlings upgraded (1.4.2.9)	Vailima nursery upgraded	Vailima nursery upgraded	1 existing nursery	Division reports Site visits	Availability of resources	MNRE - DEC
	New reserves established in Upolu and Savaii (1.4.2.10)	New reserves established	New reserves established	21 existing reserves	Division reports Site visits	Availability of resources	MNRE - DEC/LMD, STA, Land Owners
	Inventory surveys conducted for all reserves (1.4.2.11)	Number of surveys conducted	5 surveys by end of NESP period	Existing to be consolidated	Survey reports	- Availability of resources - Institutional capacity - Community engagement	MNRE - DEC / FOR/LMD, NGOs Communities
	Reserves Management Plans reviewed and updated (1.4.2.13-15)	Number of plans reviewed and updated	4 by the end of the NESP period	Existing to be consolidated	Management Plans Division reports	- Availability of resources - Institutional capacity - Community engagement	MNRE - DEC
		Malololelei, Vaitele East and West Management Plans developed	By end of NESP period	Existing to be consolidated	Management plans Division progress reports	- Availability of resources - Institutional capacity - Community engagement	MNRE - DEC, NGOs, Communities
	Protected area information updated (1.4.2.20)	Update list of protected areas	By end of NESP	New	Division reports	- Institutional capacity - Community engagement	MNRE - DEC / FOR/SIA, NGOs, Communities
	Protected area coordination mechanism established (1.4.2.20)	PA steering committee established by 18/19	By end of FY2018/19	New	Minutes	Availability of members	MNRE - DEC / FOR/LMD/SIA, NGOs, Communities
	Percentage of PA increased to at least 17% for Terrestrial and 10% for Marine areas (1.4.2.20)	% of PA calculated for Terrestrial and Marine	Annual percentage increase	Existing to be consolidated	Division reports and aerial photographs/maps	- Institutional capacity - Community engagement	MNRE - DEC/FOR/LMD/SIA. NGOs, Communities

Table 36: ESPO 1.5 : Costed Action Plan 2017-2021 (Part I).

Long Term Outcome (LTO) 1 - Protection, Conservation and Sustainable Management and Development of Samoa's Environment and Natural Resources								
End of Sector Plan Outcomes (ESPO)	1.5 Sustainable Management and Development of Oceans	YEAR AND COST OF IMPLEMENTATION					TOTAL	IMPLEMENTING PARTNERS
ACTIVITIES	SUB-ACTIVITIES	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21		
Activity 1.5.1 Strengthen sustainable management of marine and coastal environment	1.5.1.1 Formulate Samoa's Ocean Strategy / Samoa seascape framework			\$12,500.00			\$12,500.00	MNRE / MAF/CI
	1.5.1.1 Revise the Marine Wildlife Protection Regulation 2009 and strengthen its implementation, monitoring and enforcement to ensure the protection, management and conservation of targeted species.		\$10,000.00	\$10,000.00			\$20,000.00	MNRE - DEC/ LEGAL, OAG, NGOs, Communities
	1.5.1.2 Strengthen collaboration with relevant government agencies to monitor and properly manage the discharge of ballast water from ships.	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$25,000.00	MNRE - DEC, SPA, MAF
	1.5.1.3 Finalize and secure funding to implement the National Marine Sanctuary Management Framework		\$10,000.00	\$30,000.00	\$30,000.00	\$20,000.00	\$90,000.00	MNRE - DEC, MAF, NGOs, DPs, Communities
	1.5.1.4 Finalize and implement the Marine Species Action Plan		\$50,000.00		\$50,000.00		\$100,000.00	MNRE - DEC, MAF, Sector Ias, DPs, Communities
	1.5.1.5 Develop appropriate legal framework for the sustainable management and development of Mangroves				\$75,000.00		\$75,000.00	MNRE - DEC/LEGAL, OAG, MAF, NGOs, Communities, Sector Ias
	1.5.1.6 Reduce loss of mangrove from land reclamation, logging and waste disposal.	\$2,425.00	\$2,425.00	\$2,425.00	\$2,425.00	\$2,425.00	\$12,125.00	MNRE - DEC/LMD/FOR/ WRD/ PUMA, Communities, NGOs
	1.5.1.7 Encourage and support the establishment of mangrove reserves in areas of significance (critical habitats) that severely needs conservation	\$5,000.00	\$7,500.00	\$7,500.00	\$7,500.00	\$7,500.00	\$35,000.00	MNRE - DEC/LMD, Communities, NGOs, DPs
	1.5.1.8 Develop and implement Management Plans for turtle targeted nesting sites		\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$100,000.00	MNRE - DEC, MAF, NGOs, Communities, DPs
	1.5.1.9 Strengthen the involvement and active participation of communities with MPAs, to empower ownership and maintain effective monitoring and implementation of Management Plans	\$2,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$14,000.00	MNRE - DEC, MAF, NGOs, Communities, DPs
	1.5.1.10 Finalise and implement Coral Bleaching Response Plan to monitor climate change induced changes in marine habitats		\$10,000.00	\$20,000.00	\$0.00	\$0.00	\$30,000.00	MNRE - DEC/MET, MAF, NGOs, Communities, DPs
	1.5.1.11 Establish new MPAs where feasible		\$1,500.00	\$1,500.00	\$1,500.00	\$1,500.00	\$6,000.00	MNRE - DEC, MAF, NGOs, Communities
	1.5.1.12 Development and implement Management Plans for newly established MPAs		\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$4,000.00	MNRE - DEC, MAF, MWCSO, NGOs, Communities
	1.5.1.13 Review and update existing MPA Management Plans		\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$4,000.00	MNRE - DEC, MAF, NGOs, Communities, Sector IAs
	1.5.1.14 Execute bi-annual monitoring of established MPAs to assess status of corals reefs and related biodiversity		\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$40,000.00	MNRE - DEC/MET, MAF, NGOs, Communities
	1.5.1.15 Implement community based replanting schemes for coastal plants/forests, mangroves and coral reefs.	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$50,000.00	MNRE - DEC, MAF, NGOs, Communities, GEF SGP
	1.5.1.16 Provide technical support and advice to community based projects towards protection, conservation, restoration and sustainable management of marine ecosystems (eg. mangroves rehabilitation and replanting, audit assessment, management plan development, impact assessment, site visits)		\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$80,000.00	MNRE - DEC, MAF, GEF SGP
	1.5.1.17 Finalize and implement Crown-of-thorn Response Plan		\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$40,000.00	MNRE - DEC / MAF, NGOs, DPs, Communities
	1.5.1.18 Promote the year of the Whale through raising of awareness and knowledge and improved networking		\$5,000.00	\$5,000.00			\$10,000.00	MNRE - DEC, NGOs, Communities, DPs
	1.5.1.19 Develop a National Plan of Action for Sharks in collaboration with key stakeholders		\$2,000.00	\$5,000.00			\$7,000.00	MNRE - DEC , NGOs - SCS, Communities, DPs
	1.5.1.20 Develop an Emergency Response Plan to manage cetacean stranding incidents		\$5,000.00	\$5,000.00	\$5,000.00		\$15,000.00	MNRE - DEC, NGOs, Communities, DPs, Sector Ias
	1.5.1.21 Promote eco-tourism activities beneficial to the conservation of marine species and critical habitats	\$5,000.00	\$6,500.00	\$6,500.00	\$6,500.00	\$6,500.00	\$31,000.00	MNRE - DEC, STA, SHA, Communities, DPs
	1.5.1.22 Support research and surveys of lesser known marine habitats and fauna groups including seagrasses, algae, mangroves		\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$20,000.00	MNRE - DEC, NGOs, Communities, DPs, Sector Ias
	1.5.1.23 Conduct surveys to determine the status of threatened and vulnerable species		\$30,000.00	\$30,000.00	\$30,000.00	\$30,000.00	\$120,000.00	MNRE - DEC, NGOs, Communities, DPs, Sector Ias , Academic Institutions
	1.5.1.24 Support research and surveys targeting key migratory species of conservation concern		\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00	\$60,000.00	MNRE - DEC, NGOs, Communities, DPs, Sector Ias, Academic Institutions
	1.5.1.25 Improve and update databases on: cetacean stranding, cetacean survey, turtle tagging (TRED)		\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$40,000.00	MNRE - DEC
	1.5.1.26 Collate and review existing available information and educational materials and make materials available in local languages		\$10,000.00		\$10,000.00		\$20,000.00	MNRE - DEC, MESC, NGOs, Communities
	1.5.1.27 Raise the level of public awareness and education through effective outreach programs - communication, consultation, presentation, fieldtrips, information materials, training, workshops, media awareness campaign	\$8,000.00	\$18,000.00	\$18,000.00	\$18,000.00	\$18,000.00	\$80,000.00	MNRE - DEC, MESC, NGOs, Communities, Schools, DPs, Sector IAs
	1.5.1.28 Provide and participate in opportunities for staff training in research methods for marine species, assessments, surveys and data analyses.	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$25,000.00	MNRE - DEC, Academic Institutions, NGOs, DPs
Sustainable Management of Marine Environment Sub-total		\$42,425.00	\$287,925.00	\$260,925.00	\$355,925.00	\$205,925.00	\$1,165,625.00	

Continuation of Table 36: ESPO 1.5 : Costed Action Plan 2017-2021 (Part II).

Long Term Outcome (LTO) 1 - Protection, Conservation and Sustainable Management and Development of Samoa's Environment and Natural Resources								
End of Sector Plan Outcomes (ESPO)	1.5 Sustainable Management and Development of Oceans							
ACTIVITIES	SUB-ACTIVITIES	YEAR AND COST OF IMPLEMENTATION					TOTAL	IMPLEMENTING PARTNERS
		FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21		
Activity 1.5.2 To strengthen sustainable management of fisheries resources and control of fishing practices	1.5.2.1 (ref ASP 4.1.1) Strengthen Community-based Fisheries Program	\$70,000.00	\$70,000.00	\$70,000.00	\$70,000.00	\$70,000.00	\$350,000.00	MAF, MNRE, MWCD / CI, SPC
	1.5.2.2 (ref ASP 4.4.1) Implement robust monitoring, control, surveillance and enforcement programs for offshore fisheries	\$100,000.00	\$100,000.00	\$100,000.00	\$100,000.00	\$100,000.00	\$500,000.00	MAF, SPA, MWTI, POLICE/SPC
	1.5.2.3 (ref ASP 4.4.2) Promote and strengthen environmentally friendly aquaculture/mariculture farming practices	\$100,000.00	\$100,000.00	\$100,000.00	\$100,000.00	\$100,000.00	\$500,000.00	MAF/SPC
	1.5.2.4 (ref ASP 4.4.3) Review fisheries plans to ensure coherent DRR and CCA concepts are included ready for implementation	\$100,000.00	\$100,000.00	\$100,000.00	\$100,000.00	\$100,000.00	\$500,000.00	MAF/SPC/ MNRE - DMO
	<i>Sustainable Management of Fisheries Resources</i>	\$370,000.00	\$370,000.00	\$370,000.00	\$370,000.00	\$370,000.00	\$1,850,000.00	
Activity 1.5.3 To improve oceans monitoring information and data	1.5.3.1 Conduct Oceanographic Monitoring (ocean acidification)		\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$200,000.00	SPREP/MNRE - Met - GEF
	1.5.3.2 Implement Climate and Ocean Support Program for the Pacific (COSPPac)		\$15,000.00	\$25,000.00	\$40,000.00	\$40,000.00	\$120,000.00	SPREP/SPC/ MNRE - Met
	1.5.3.3 Build capacity to conduct oceans monitoring programs		\$10,000.00	\$10,000.00	\$20,000.00	\$20,000.00	\$60,000.00	SPREP/SPC/Met.
	1.5.3.4 Calculate Samoa's OHI Scores as a tracking tool for SDG 14			\$10,000.00	\$10,000.00	\$10,000.00	\$30,000.00	MNRE/MAF/CI
	1.5.3.5 Establish Ocean Health Network for Samoa			\$10,000.00	\$10,000.00	\$10,000.00	\$30,000.00	MNRE / MAF/CI
	<i>Oceans Monitoring Data Sub-Total</i>	\$0.00	\$75,000.00	\$105,000.00	\$130,000.00	\$130,000.00	\$440,000.00	
	Grand total	\$412,425.00	\$732,925.00	\$735,925.00	\$855,925.00	\$705,925.00	\$3,455,625.00	

Table 37: ESPO 1.5 : MTEF 2017-2021.

ESPO 1.5 MTEF						
NESP Period	Recurrent	Investment	Secured		Shortfall	
			Recurrent	Investment	Recurrent	Investment
2016/17	\$2,188,906.00	\$328,000.00	\$2,188,906.00	\$328,000.00	\$0.00	\$0.00
2017/18	\$2,188,906.00	\$648,500.00	\$2,188,906.00	\$408,000.00	\$0.00	\$240,500.00
2018/19	\$2,188,906.00	\$664,000.00	\$2,188,906.00	\$450,500.00	\$0.00	\$213,500.00
2019/20	\$2,188,906.00	\$771,500.00	\$2,188,906.00	\$458,000.00	\$0.00	\$313,500.00
2020/21	\$2,188,906.00	\$621,500.00	\$2,188,906.00	\$458,000.00	\$0.00	\$163,500.00
SUB-TOTAL	\$10,944,530.00	\$3,033,500.00	\$10,944,530.00	\$2,102,500.00	\$0.00	\$931,000.00
TOTAL	\$13,978,030.00		\$13,047,030.00		\$931,000.00	

Table 38: ESPO 1.5 : Performance Management Framework 2017-2021 (Part I).

ESPO 1.5	Outputs	Performance Indicator	Target	Baseline (2015)	Means of Verification	Assumptions	Lead IA(s)
Activity 1.5.1 Strengthen sustainable management of the marine and coastal environment	Marine Wildlife Protection Regulation 2009 amended (1.5.1.1)	Regulatory framework amended	By end of 2017-18	Regulations 2009	Amended Regulations	Availability of resources	MNRE - DEC/LEGAL, OAG
	Effective management of ballast water from ships (1.5.1.2)	Management framework in place	By end of 2018/19	New	Ballast Management Framework	Availability of resources	MNRE - DEC , SPA
		Volume of ballast water emptied pa	Vol. of ballast water emptied pa	Existing to be consolidated	Division reports	- Staff capacity - Strong collaboration	MNRE - DEC, SPA
	National Marine Sanctuary Framework implemented (1.5.1.3)	Extent of framework implemented	5% of framework implemented pa	Existing to be consolidated	Division reports	- Availability of resources - Strong collaboration - community engagement	MNRE - DEC, MAF, NGOs, DPs
	Marine Species Action Plan implemented (1.5.1.4)	Extent of Action Plan implemented	5% plan implemented pa	Existing to be consolidated	Division reports	- Availability of resources - Community engagement	MNRE - DEC, MAF , NGOs, DPs
	Legal Framework for Mangroves developed (1.5.1.5-7)	Legal framework for mangroves developed	By end of 2019/20	New	Legal framework	Availability of resources	MNRE - DEC, NGOs, DPs, MAF
		Number of mangrove reserves established	2 reserves by end of NESP period	New	Division reports	- Availability of resources - Community engagement	
		Mangrove audits conducted	Audits conducted	New	Audit reports	- Community engagement - Strong collaboration	
	Management Plans for targeted turtle nesting areas developed (1.5.1.8)	Number of Management Plans developed	2 plans by end of NESP period	New	Management Plans Division reports	- Availability of resources - Community engagement	MNRE - DEC
	Coral Bleaching (CBR) Response Plan developed (1.5.1.10)	CBR Plan developed	By end of 2018/19	New	Response Plan Division reports	- Availability of resources - Community engagement	MNRE - DEC/MET/ DMO, MAF
	New MPAs established (1.5.1.11 - 13)	No. of MPAs established	1 new MPA by end of NESP period	Existing to be consolidated	Division reports	- Availability of resources - Community engagement	MNRE - DEC, MAF, NGOs, Communities, DPs
		Management Plans developed	1 Management Plan by end of NESP period	Existing to be consolidated	Management Plan Division reports	- Availability of resources - Community engagement	
	Status of established MPAs assessed (1.5.1.14)	Biennial monitoring conducted	Every 2 years	Existing to be consolidated	Monitoring reports	- Availability of resources - Community engagement	MNRE - DEC, NGOs, DPs , Communities
	Community based replanting schemes implemented (1.5.1.15)	Cumulative total of area covered by replanting scheme	Coverage pa	Existing to be consolidated	Division reports Maps	- Availability of resources - Community engagement	MNRE - DEC DPs, NGOs, Communities
	Community based projects promoted and supported (1.5.1.16)	Number of community based projects supported	Number of projects pa	Existing to be consolidated	Division reports Project reports	- Availability of staff - Community engagement - Strong collaboration	MNRE - DEC GEF SGP CSSP NGO Communities

Continuation of Table 38: ESPO 1.5 : Performance Management Framework 2017-2021 (Part II).

ESPO 1.5	Outputs	Performance Indicator	Target	Baseline (2015)	Means of Verification	Assumptions	Lead IA(s)
Activity 1.5.1 Strengthen sustainable management of the marine and coastal environment	Crown-of-thorn response plan developed (1.5.1.17/24)	COT Response plan developed	By end of 2019/20	New	COT Response Plan	• Availability of resources • Community engagement	MNRE - DEC/MAF NGOs, Communities
	Awareness Programs implemented (1.5.1.18/26-27/)	No. programs implemented	Annual programs implemented	Ongoing	Division progress reports	• Availability of resources • Community engagement	MNRE - DEC, IAs NGOs, Communities
	National Plan of Action for Sharks (1.5.1.19)	Plan developed	By end of 2018/19	New	National Plan of Action	• Availability of resources • Community engagement	MNRE - DEC, MAF NGOs, DPs
	Emergency Response Plan for Cetacean stranding developed (1.5.1.20)	Plan developed	By end of 2019/10	New	Emergency Response Plan	• Availability of resources • Community engagement • Strong collaboration	MNRE - DEC/DMO FESA
	Eco-tourism activities promoted (1.5.1.21)	Number of eco-tourism operations	Eco-tourism operations pa	Ongoing	Division Reports Tourist operators	• Strong collaboration • Availability of data	MNRE - DEC STA / SHA
	Research/survey on lesser known species conducted (1.5.1.22)	Research/surveys conducted	By end of NESP period	New	Research/ survey reports	• Availability of resources • Community engagement • Staff capacity	MNRE - DEC, Academic Institutions, NGOs
	Status of threatened and vulnerable species(1.5.1.23)	Assessment (s) conducted	By end of NESP period	Existing to be consolidated	Assessment Report /SOE Report	• Availability of resources • Community engagement	MNRE - DEC, IAs
	Staff trained in research programs (1.5.1.28)	Number of staff trained	By end of NESP period	Existing to be consolidated	Training reports	• Availability of staff • Availability of resources	MNRE DEC,
Activity 1.5.2 Strengthen sustainable management of fisheries resources and control of fishing practices	100% (300) villages participating in community-based fisheries management program through endorsement of village fisheries plans and village by-laws (1.5.2.1 ASP 4.1.1)	Number of villages participating in community based fisheries management programs	300 villages by end of NESP /ASP period	Existing to be consolidated	Division reports Village Fisheries Plans Village By-laws	• Availability of resources • Strong collaboration • Community engagement / ownership	MAF - Fisheries MNRE MWCSO CI SPC
	100% coverage of fishing related activities managed within Samoa's EEZ and Ports (1.5.2.2 ASP 4.4.1)	% coverage of fishing related activities managed within Samoa's EEZ and Ports	100% coverage annually	Existing to be consolidated	Division progress reports	• Availability of resources • Staff capacity • Strong collaboration • Community engagement	MAF - Fisheries SPA MWTI POLICE SPC
	Increased aquaculture/ Mariculture fish/invertebrate production through environmentally friendly practices (1.5.2.3 ASP 4.4.2)	100% of aquaculture/ mariculture fish/invertebrate farms use environmentally friendly practices	By end of NESP /ASP period	Existing to be consolidated	Division progress reports	• Availability of resources • Community capacity • Community engagement • Strong collaboration	MAF - Fisheries SPC

Continuation of Table 38: ESPO 1.5 : Performance Management Framework 2017-2021 (Part III).

ESPO 1.5	Outputs	Performance Indicator	Target	Baseline (2015)	Means of Verification	Assumptions	Lead IA(s)
Activity 1.5.2 Strengthen sustainable management of fisheries resources and control of fishing practices (cont)	Disaster risk proof fishing practices and management included in fisheries plans and implemented (1.5.2.4 ASP 4.4.3)	100% of Fisheries Plans disaster risk proofed	100% of Plans disaster risk proofed by end of NESP / ASP Period	Existing to be consolidated	Division progress reports Fisheries Plans	• Availability of resources • Institutional capacity • Strong collaboration • Community engagement	MAF - Fisheries / MNRE - DMO
Activity 1.5.3 Improve oceans monitoring information and data	Ocean Monitoring conducted (1.5.3.1 - 2)	Ocean monitoring results available	Annual ocean monitoring reports	Existing to be consolidated	Ocean monitoring reports	• Availability of data • Institutional capacity	MNRE - MET
	Ocean monitoring capacity and network increased (1.5.3.3)	Number of trainings attended by staff	5 trainings pa	Existing to be consolidated	Training reports	• Availability of resources • Institutional capacity	MNRE - MET, Academic institutions
		Ocean monitoring infrastructure in place	Ocean monitoring network expanded	Existing to be consolidated	Division progress reports	• Availability of resources • Institutional capacity	MNRE - MET , DPs

Table 39: LTO 2 : Outcomes Map 2017-2021.

LONG TERM OUTCOME 2: More Sustainable and Resilient Built Environment				
END OF SECTOR PLAN OUTCOMES (ESPO)				
2.1 Sustainable management of solid waste improved	2.2 Sound management of chemicals and hazardous waste improved	2.3 Management of wastewater improved	2.4 Low carbon developments through energy efficiency and renewable energy improved	2.5 Sustainable development planning and environmental monitoring improved
OUTPUTS				
National Solid Waste Management Policy reviewed Waste Management Specialised Unit per PSC Functional Analysis Report National Waste Recycling Policy developed Waste Management Regulations developed National Waste Management Strategy developed Waste audit for Upolu and Savaii conducted National E-waste policy developed and implemented National Waste Minimisation Strategy developed and implemented Tafaigata and Vaiaata Landfills managed and maintained effectively Waste collection contracts managed effectively Illegal dumping incidents reduced Waste surveys conducted Awareness programs Plastic Bag Prohibition enforced Segregation bins and cages installed in selected public places Household organic composts promoted Non-biodegradable wastes recycled Tafaigata Landfill extended New landfill constructed in Savaii	Chemicals and hazardous regulations developed Waigani/Basel Regulation developed Healthcare waste disposal plan implemented Inception workshop for Mercury Project conducted Baseline for hazardous chemicals conducted POPs Inventory Trainings conducted Effective monitoring processes and infrastructures in place Chemicals and hazardous waste collection and disposal services provided Increased compliance with Pesticides Act and Regulations Agricultural chemical users trained and certified Public awareness programs conducted	Institutional capacity enhanced National effluent standards developed Regulations on collection, transportation, disposal, use and treatment of sludge developed Increased compliance with approved septic tank standards targeting the AUA Increased compliance with the Code of Environmental Practice on Odour Control Number of certified Plumbers increased Sanitation MOU implemented Public awareness programs conducted Environmental impacts from sludge facilities monitored Feasibility of additional sludge facilities explored Public toilet facilities maintained and in good condition Sludge treatment facilities maintained Environmentally friendly sanitation facilities piloted and rolled out Wastewater Treatment Plant managed effectively	NAMA developed Energy Efficiency Policy for the Transport Sector developed Energy Efficiency Policy for Electricity Sector developed Renewable Energy Act enforced Renewable energy registry established GHG Abatement Strategy reviewed Alternative sources of renewable energy piloted Partnership for low carbon tools established Extensive public awareness programs conducted Energy efficient government buildings promoted 100% renewable electricity achieved Energy efficiency and renewable energy promoted in the transport sector	PUMA Act 2004 amended Notifications/Exempt Development Regulations developed Development consent process facilitated effectively Number of Development Consents issued Environment & social safeguards monitored and enforced New policies drafted to support PUM Act Sustainable Management Plans developed Planning provisions required under the PUM Act developed Vaitele SMP implemented Apia Waterfront Plan implemented CIM Plans reviewed and updated CIM Plans implemented Apia City Spatial Plan implemented PPCR Project implemented and completed successfully Adaptation Fund Project implemented and completed successfully Planning and Urban Management Board meetings conducted Public amenity issues identified and addressed Environmental monitoring surveys conducted for Apia Urban area and Vaitele industrial area New engineering solutions to resolve amenity issues identified
ACTIVITIES				
2.1.1 Strengthen Policy, Regulatory and Institutional Framework for Sustainable Management of Solid Waste 2.1.2 Strengthen Management of Waste Collection Contracts 2.1.3 Implement Waste Minimisation Initiatives 2.1.4 Improve infrastructure for sustainable management of solid waste	2.2.1 Strengthen Policy and Legislative Framework for safe and sustainable management of chemicals and hazardous waste 2.2.2 Strengthen Monitoring of Chemicals and Hazardous Waste 2.2.3 Promote wider awareness and education on chemicals and hazardous waste	2.3.1 Strengthen Policy and Regulatory Framework for Sanitation 2.3.2 Increase compliance with approved sanitation standards 2.3.3 Strengthen management of sanitation and wastewater facilities	2.4.1 Strengthen policy, legislative and institutional framework for low carbon developments 2.4.2 Promote Research and Development on alternative energy sources and energy efficiency 2.4.3 Promote Partnership on energy efficiency and renewable energy 2.4.4 Promote wider awareness and educational programs on EE and RE	2.5.1 Strengthen regulatory systems to support sustainable planning and development 2.5.2 Implement appropriate tools and procedures to facilitate strategic planning and development 2.5.3 Provide effective urban management services to support sustainable planning and development

Table 40: ESPO 2.1 : Costed Action Plan 2017-2021.

Long Term Outcome (LTO) 2 - More Sustainable and Resilient Built Environment								
End of Sector Plan Outcomes (ESPO)	2.1 Sustainable Solid Waste Management Improved	YEAR AND COST OF IMPLEMENTATION (SAT)					TOTAL	IMPLEMENTING PARTNERS
ACTIVITIES	SUB-ACTIVITIES	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21		
Activity 2.1.1 Strengthen Policy, Regulatory and Institutional Framework for Sustainable Management of Solid Waste	2.1.1.1 Review existing National Solid Waste Management Policy	\$10,000.00					\$10,000.00	MNRE - DEC, Private Sector , Sector IAs
	2.1.1.2 Set up Waste specialised unit per PSC Functional Analysis	\$183,950.00	\$183,950.00	\$323,966.00	\$323,966.00	\$323,966.00	\$1,339,798.00	MNRE - DEC/CORP. SERVICES, PSC, MOF
	2.1.1.3 Develop a Recycling Policy		\$60,000.00				\$60,000.00	MNRE - DEC, Private Sector , Sector IAs
	2.1.1.4 Develop Waste Management Regulations		\$110,000.00				\$110,000.00	MNRE - DEC / LEGAL, OAG
	2.1.1.5* Develop a National Waste Management Strategy	\$0.00	\$60,000.00				\$60,000.00	MNRE - DEC , Private Sector, NGOs, Sector IAs
	2.1.1.6 Conduct Waste Audit for both Upolu and Savaii urban areas		\$20,000.00	\$20,000.00			\$40,000.00	MNRE - DEC
	2.1.1.7 Develop and Implement a National E-waste Policy			\$60,000.00	\$20,000.00	\$20,000.00	\$100,000.00	MNRE - DEC, MCIT, Private Sector, MOF, Sector IAs
	2.1.1.8 Develop and Implement a National Waste Minimization Strategy		\$60,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$120,000.00	MNRE-DEC, Private Sector, NGOs, DPs, Communities
	Policy and Regulatory Framework Sub-total	\$193,950.00	\$493,950.00	\$423,966.00	\$363,966.00	\$363,966.00	\$1,839,798.00	
Activity 2.1.2 Strengthen management of waste collection contracts	2.1.2.1 Ensure effective management and maintenance of existing landfills		\$3,000,000.00	\$3,000,000.00	\$3,000,000.00	\$3,000,000.00	\$12,000,000.00	MNRE - DEC, Private Sector
	2.1.2.2 Manage and monitor lawn maintenance contracts	\$268,503.00	\$268,503.00	\$268,503.00	\$268,503.00	\$268,503.00	\$1,342,515.00	MNRE - DEC / LMD, Private Sector
	2.1.2.3 <i>Manage and</i> Monitor performance of waste collection contractors	\$2,101,192.00	\$2,101,192.00	\$2,101,192.00	\$2,101,192.00	\$2,101,192.00	\$10,505,960.00	MNRE - DEC / LEGAL, OAG
	2.1.2.4 Investigate reported illegal dumping incidents						\$0.00	MNRE - DEC
	2.1.2.5 Conduct time and motion surveys						\$0.00	MNRE - DEC
	2.1.2.6 Conduct waste characterization surveys						\$0.00	MNRE - DEC
	Waste Collection Contracts Sub-total	\$2,369,695.00	\$5,369,695.00	\$5,369,695.00	\$5,369,695.00	\$5,369,695.00	\$23,848,475.00	
Activity 2.1.3 Implement Waste Minimisation Initiatives	2.1.3.1 Conduct awareness programs for waste segregation at source	\$4,000.00	\$4,000.00	\$4,000.00	\$4,000.00	\$4,000.00	\$20,000.00	MNRE - DEC, Sector IAs, Private Sector, Communities, Schools
	2.1.3.2 Monitor compliance to the Plastic Bag Prohibition on Importation Amendment Regulation 2013	\$0.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$8,000.00	MNRE - DEC, Private Sector
	2.1.3.3 Install segregation bins/cages at public places		\$50,000.00				\$50,000.00	MNRE - DEC, Private Sector
	2.1.3.4 Encourage supermarkets to install their segregation bins/cages at their premises		\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$20,000.00	MNRE - DEC, Private Sector
	2.1.3.5 Produce educational and awareness materials promoting waste segregation at source	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$10,000.00	MNRE - DEC, MESC
	2.1.3.6 Include a separate collection for recyclable materials in the Government's waste collection program		\$250,000.00	\$250,000.00	\$250,000.00	\$250,000.00	\$1,000,000.00	MNRE - DEC, MOF, Public sector IAs
	2.1.3.7 Promote household composting of organic wastes and vegetable gardening	\$4,000.00	\$4,000.00	\$4,000.00	\$4,000.00	\$4,000.00	\$20,000.00	MNRE - DEC, Communities, NGOs, DPs
	2.1.3.8 Facilitate and promote recycling of non-biodegradable wastes	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$10,000.00	MNRE - DEC, Private Sector, NGOs, Communities, DPs
	2.1.3.9 Implement Container Deposit Levy			\$60,000.00			\$60,000.00	MNRE - DEC, MOF, MOR
	2.1.3.10 Enhance relevant stakeholders' participation in waste management		\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$20,000.00	MNRE - DEC
	2.1.3.11 Conduct community and school workshops on waste minimization initiatives (segregation at source)		\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$80,000.00	MNRE - DEC, NGOs, Communities
	Waste Segregation Sub-total	\$12,000.00	\$344,000.00	\$354,000.00	\$294,000.00	\$294,000.00	\$1,298,000.00	
Activity 2.1.4 Improve infrastructure for sustainable management of solid waste	2.1.4.1 Extend Tafaigata landfill to accommodate proper waste disposal			\$2,000,000.00			\$2,000,000.00	MNRE - DEC, Private Sector, Communities, DPs
	2.1.4.2 Construct new waste landfill for Savaii			\$2,000,000.00			\$2,000,000.00	MNRE - DEC, Private Sector, Communities, DPs
	Solid Waste Management Sub-total	\$0.00	\$0.00	\$4,000,000.00	\$0.00	\$0.00	\$4,000,000.00	
	GRAND TOTAL	\$2,575,645.00	\$6,207,645.00	\$10,147,661.00	\$6,027,661.00	\$6,027,661.00	\$30,986,273.00	

Table 41: ESPO 2.1 : MTEF 2017-2021.

ESPO 2.1 MTEF						
NESP Period	Recurrent	Investment	Secured		Shortfall	
			Recurrent	Investment	Recurrent	Investment
2016/17	\$2,584,070.00	\$22,000.00	\$2,584,070.00	\$0.00	\$0.00	\$22,000.00
2017/18	\$2,596,070.00	\$3,642,000.00	\$2,596,070.00	\$0.00	\$0.00	\$3,642,000.00
2018/19	\$2,736,086.00	\$7,442,000.00	\$2,596,070.00	\$0.00	\$140,016.00	\$7,442,000.00
2019/20	\$2,736,086.00	\$3,322,000.00	\$2,596,070.00	\$0.00	\$140,016.00	\$3,322,000.00
2020/21	\$2,736,086.00	\$3,322,000.00	\$2,596,070.00	\$0.00	\$140,016.00	\$3,322,000.00
SUB-TOTAL	\$13,388,398.00	\$17,750,000.00	\$12,968,350.00	\$0.00	\$420,048.00	\$17,750,000.00
TOTAL	\$31,138,398.00		\$12,968,350.00		\$18,170,048.00	

Table 42: ESPO 2.1 : Performance Management Framework 2017-2021 (Part I).

ESPO 2.1	Outputs	Performance Indicator	Target	Baseline (2015)	Means of Verification	Assumptions	Responsible IA
Activity 2.1.1 Strengthen Policy, Regulatory and Institutional Framework for Sustainable Management of Solid Waste	National Solid Waste Management Policy reviewed (2.1.1.1)	Policy reviewed	By end of 2016/17	NA	Policy document	Availability of resources	MNRE - DEC
	Specialised Waste Management Unit (2.1.1.2)	Specialised unit established	By end of 2018/19	Waste Section under DEC	MNRE Organisational Structure	Availability of resources	MNRE - DEC /CORP. SERVICES PSC MOF
	National Waste Recycling Policy developed (2.1.1.3)	Waste Recycling Policy developed	By end of 2017/18	New	Policy document	Availability of resources	MNRE - DEC
	Waste Management Regulations developed (2.1.1.4)	Regulations developed	By end of 2017/18	New	Regulations	Availability of resources	MNRE - DEC /LEGAL
	National Waste Management Strategy developed (2.1.1.5)	Strategy developed	By end of 2017/18	New	National Strategy	Availability of resources	MNRE - DEC
	Waste audit for Upolu and Savaii conducted (2.1.1.6)	Upolu and Savaii audits conducted	By end of 2018/19	Existing to be consolidated	Audit reports	- Availability of resources - Institutional capacity	MNRE - DEC
	National E-waste policy developed and implemented (2.1.1.7)	Policy developed	By end of 2018/19	New	Policy document	- Availability of resources - Collaboration	MNRE - DEC MCIT
	National Waste Minimisation Strategy developed (2.1.1.8)	Strategy developed	By end of 2017/18	Nil	Strategy document	- Availability of resources - Strong collaboration	MNRE - DEC
Activity 2.1.2 Strengthen management of waste collection contracts	Landfills managed and maintained effectively (2.1.2.1 -2)	Maintenance contracts	By end of NESP period	Existing to be consolidated	Maintenance contracts	- Availability of resources - Collaboration	MNRE - DEC
	Waste collection contracts managed effectively (2.1.2.3)	Number of complaints received	Complaints received annually	Ongoing	Division reports	- Availability of resources - Private sector capacity - Institutional capacity	MNRE - DEC Private Sector
	Illegal dumping incidents reduced (2.1.2.4)	Number of illegal dumping incidents verified and addressed	Number of incidents pa	Ongoing	Division progress reports	- Availability of resources - Private sector capacity - Community engagement	MNRE - DEC Private Sector Communities
	Waste surveys conducted 2.1.2.5-6	Number of time and motion surveys undertaken	Time and motion surveys conducted	By the end of NESP period	Survey report	- Availability of staff - Capacity of staff	MNRE - DEC
		Number of waste characterisation surveys conducted	Characterisation surveys conducted	By the end of the NESP period	Survey report	- Availability of staff - Capacity of staff	MNRE - DEC

Continuation of Table 42: ESPO 2.1 : Performance Management Framework 2017-2021 (Part II).

ESPO 2.1	Outputs	Performance Indicator	Target	Baseline (2015)	Means of Verification	Assumptions	Lead IA(s)
Activity 2.1.3 Implement Waste Minimisation Initiatives	Awareness programs (2.1.3.1/5/10-11)	Number of programs conducted	Annual programs conducted pa	Ongoing	Division progress reports	• Availability of resources • Community engagement	MNRE - DEC
		Educational materials produced and disseminated	Educational materials produced and disseminated pa	Ongoing	Division progress reports Materials	• Availability of resources • Availability of Schools	MNRE - DEC MESC
		Increased participation in waste management programs	Total number of participants in all programs pa	Ongoing	Division progress reports	• Availability of resources • Community engagement • Strong collaboration	MNRE - DEC
	Plastic Bag Prohibition enforced (2.1.3.2)	Number of non-compliance cases reported	Number of non-compliance cases reported annually	Ongoing	Division progress reports	• Availability of resources • Monitoring and enforcement capacity	MNRE - DEC
	Segregation bins and cages installed in selected public places (2.1.3.3-4/6)	Number of bins/cages installed in public places	Bins/cages installed in public places	New	Division reports Site visits	• Availability of resources • Private Sector support	MNRE - DEC
		Number of supermarkets with bins/cages installed	No. of supermarkets starting from 2017/18	New	Division reports Site visits	• Private Sector support • Strong collaboration	MNRE - DEC Private Sector
		Segregated recyclable materials collected	Segregated recyclable materials collected	New	Collection contracts	• Availability of resources • Community engagement	MNRE - DEC
		Volume of recyclable materials collected	Vol. of recyclable materials collected	New	Division progress reports	• Availability of resources • Private sector capacity	MNRE - DEC
	Household organic composts (2.1.3.7)	Number of household programs conducted	Number of programs conducted pa	Ongoing	Division progress reports	• Availability of resources • Community engagement	MNRE - DEC
	Non-biodegradable wastes recycled (2.1.3.8)	Number of programs conducted	Number of programs conducted pa	Ongoing	Division progress reports	• Availability of resources • Community engagement • Private sector support	MNRE - DEC
Activity 2.1.4 Improve infrastructure for sustainable management of solid waste	Container deposit levy implemented (2.1.3.9)	Container deposit levy in force and implemented	By end of 2018/19	New	Container deposit levy scheme	• Institutional capacity • Private sector support	MNRE - DEC
	Tafaigata Landfill extended (2.1.4.1)	Tafaigata Landfill extended	By end of 2018/19	Existing landfill	Extension design Works contract Site visit	• Availability of resources • Timeliness of procurement	MNRE - DEC
	New landfill constructed in Savaii (2.1.4.2)	New Landfill constructed in Savaii	By end of 2018/19	Vaiaata Landfill (1)	Design of new landfill Works contract Site visit	• Availability of resources • Timeliness of procurement • Community engagement	MNRE - DEC MOF OAG

Table 43: ESPO 2.2 : Costed Action Plan 2017-2021.

Long Term Outcome (LTO) 2 - More Sustainable and Resilient Built Environment								
End of Sector Plan Outcomes (ESPO)	2.2 Sound management of Chemicals and Hazardous Waste Improved							
ACTIVITIES	SUB-ACTIVITIES	YEAR AND COST OF IMPLEMENTATION (SAT)					TOTAL	IMPLEMENTING PARTNERS
		FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21		
Activity 2.2.1 Strengthen Policy and Legislative Framework for safe and sustainable management of chemicals and hazardous waste	2.2.1.1 Develop and enforce Chemicals and Hazardous Waste Regulations	\$30,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$50,000.00	MNRE - DEC, MOH, MAF, Private Sector, Sector Ias, DPs
	2.2.1.2 Develop Waigani/Basel Regulation		\$50,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$65,000.00	MNRE - DEC/LEGAL, OAG, MAF
	2.2.1.3 Implement Health Care waste disposal plan	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$18,000.00	MOH, MNRE-DEC, Sector Ias, DPs, Private Sector, NHS
	2.2.1.4 Review and update transboundary movement database of hazardous waste	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$25,000.00	MNRE - DEC / MET
	2.2.1.5 Implement appropriate Convention guidelines, and available measures to improve regulation of chemical and hazardous waste	\$6,000.00	\$6,000.00	\$6,000.00	\$6,000.00	\$6,000.00	\$30,000.00	MNRE - DEC/LEGAL, OAG, MAF
	2.2.1.6 Formulate, implement and enforce chemical management plans and regulatory tools	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$50,000.00	MNRE - DEC / MET, MAF, MOH, MOR
	2.2.1.7 Improve enforcement process of policies and regulations in place	\$8,000.00	\$8,000.00	\$8,000.00	\$8,000.00	\$8,000.00	\$40,000.00	MNRE - DEC/LEGAL, MAF, MOH, MOR, MCIL
Policy and Legislative Framework		\$61,000.00	\$86,000.00	\$41,000.00	\$41,000.00	\$41,000.00	\$278,000.00	
Activity 2.2.2 Strengthen Monitoring of Chemicals and Hazardous Waste	2.2.2.1 Conduct Inception Workshop for new Mercury Project 2016	\$90,000.00	\$80,000.00				\$170,000.00	MNRE - DEC, DPs, Sector Ias
	2.2.2.2 Conduct baseline survey for hazardous chemicals	\$20,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$28,000.00	MNRE - DEC / MET
	2.2.2.3 Conduct inventory trainings for POPs	\$10,000.00	\$9,000.00				\$19,000.00	MNRE - MET
	2.2.2.4 Conduct monitoring and evaluation of the existing and developed regulating softwares	\$4,000.00	\$4,000.00	\$4,000.00	\$4,000.00	\$4,000.00	\$20,000.00	MNRE - DEC
	2.2.2.5 Improve monitoring network in data collection and baseline update	\$4,000.00	\$4,000.00	\$4,000.00	\$4,000.00	\$4,000.00	\$20,000.00	MNRE - DEC/MET
	2.2.2.6 Provide collection services, proper disposal facilities	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$100,000.00	MNRE - DEC
	2.2.2.7 Improve networking in data sharing tools	\$4,000.00	\$4,000.00	\$4,000.00	\$4,000.00	\$4,000.00	\$20,000.00	MNRE - DEC, MAF, MOH
	2.2.2.8 Enforce Tracking system to monitor chemical and hazardous products	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$50,000.00	MNRE - DEC/MET, MAF, MOH, MOR
	2.2.2.9 Strengthen capacity response to consumers demands and natural disasters	\$8,000.00	\$8,000.00	\$8,000.00	\$8,000.00	\$8,000.00	\$40,000.00	MNRE - DEC / DMO , MAF, MOH
	2.2.2.10 Improve effective monitoring process on trade, collection and storage management of chemical & hazardous waste	\$5,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$13,000.00	MNRE - DEC
	2.2.2.11 Establish a Chemical and/or Hazardous Waste Information Network to coordinate data sharing and response	\$10,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$30,000.00	MNRE - DEC/MET, MAF, MOH, MOR
	2.2.2.12 (ref. 4.2.1 ASP) Rigorously maintain Register for Agricultural Chemicals - distribution and use and monitor imports of agricultural chemicals in line with legislative and regulatory framework in place	\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00	\$375,000.00	MAF (Quarantine), Pesticides Committee, SPREP, MNRE
	2.2.2.13 (ref.4.2.2 ASP) Provide training to relevant stakeholders on safe use, storage, disposal and awareness of agricultural chemicals and maintain certification of user system	\$80,000.00	\$80,000.00	\$80,000.00	\$80,000.00	\$80,000.00	\$400,000.00	MAF, FFI/SFA/ MNRE
Monitoring of Chemicals and Hazardous Waste		\$340,000.00	\$303,000.00	\$214,000.00	\$214,000.00	\$214,000.00	\$1,285,000.00	
2.2.3 Promote wider awareness and education on chemicals and hazardous waste	2.2.3.1 Enhanced coordination and collaboration amongst key relevant stakeholders	\$6,000.00	\$6,000.00	\$6,000.00	\$6,000.00	\$6,000.00	\$30,000.00	MNRE - DEC/MET, MAF, MOH, MOR, Private Sector
	2.2.3.2 Improve and promote public awareness campaign	\$4,000.00	\$4,000.00	\$4,000.00	\$4,000.00	\$4,000.00	\$20,000.00	MNRE - DEC / MET, MAF
	2.2.3.3 Enhance effective community engagement in chemical and hazardous waste management	\$16,000.00	\$16,000.00	\$16,000.00	\$16,000.00	\$16,000.00	\$80,000.00	MNRE - DEC/MET, MAF, MOH, DPs, Private Sector
Chemicals and Hazardous Waste Awareness Promotion Sub-total		\$26,000.00	\$26,000.00	\$26,000.00	\$26,000.00	\$26,000.00	\$130,000.00	
Grand total		\$427,000.00	\$415,000.00	\$281,000.00	\$281,000.00	\$281,000.00	\$1,685,000.00	

Table 44: ESPO 2.2 : MTEF 2017-2021.

ESPO 2.2 MTEF						
NESP Period	Recurrent	Investment	Secured		Shortfall	
			Recurrent	Investment	Recurrent	Investment
2016/17	\$1,345,722.00	\$342,000.00	\$1,277,692.00	\$100,000.00	\$68,030.00	\$242,000.00
2017/18	\$1,345,722.00	\$330,000.00	\$1,277,692.00	\$89,000.00	\$68,030.00	\$241,000.00
2018/19	\$1,345,722.00	\$196,000.00	\$1,277,692.00	\$0.00	\$68,030.00	\$196,000.00
2019/20	\$1,345,722.00	\$196,000.00	\$1,277,692.00	\$0.00	\$68,030.00	\$196,000.00
2020/21	\$1,345,722.00	\$196,000.00	\$1,277,692.00	\$0.00	\$68,030.00	\$196,000.00
SUB-TOTAL	\$6,728,610.00	\$1,260,000.00	\$6,388,460.00	\$189,000.00	\$340,150.00	\$1,071,000.00
TOTAL	\$7,988,610.00		\$6,577,460.00		\$1,411,150.00	

Table 45: ESPO 2.2 : Performance Management Framework 2017-2021.

ESPO 2.2	Outputs	Performance Indicator	Target	Baseline (2015)	Means of Verification	Assumptions	Lead IA(s)
Activity 2.2.1 Strengthen Policy and Legislative Framework for safe and sustainable management of chemicals and hazardous waste	Chemicals and hazardous regulations developed (2.2.1.1/6-7)	Chemicals and Hazardous regulations in place	In place and in force by end of NESP period	Nil	Regulations	• Availability of resources • Institutional capacity • Strong collaboration	MNRE - DEC
	Waigani/Basel Regulation developed (2.2.1.2/4)	Waigani/Basel Regulation developed	In place and in force by end of NESP period	Nil	Waigani/Basel Regulation	• Availability of resources • Institutional capacity	MNRE - DEC
	Healthcare waste disposal plan implemented (2.2.1.3)	Extent of implementation of Plan	30% implementation by end of NESP period	Existing to be consolidated	Division progress report Plan review report	• Availability of resources • Staff capacity • Strong collaboration	MOH
Activity 2.2.2 Strengthen Monitoring of Chemicals and Hazardous Waste	Inception workshop for Mercury Project conducted (2.2.2.1)	Workshop conducted	By end of 2017/18	Nil	Inception Report Division report	• Strong collaboration • Private sector support • Availability of resources	MNRE - DEC
	Baseline for hazardous chemicals conducted (2.2.2.2)	Baseline survey conducted annually	Consolidated Baseline Survey by end of NESP period	Nil	Consolidated Baseline survey report	• Availability of resources • Private sector support • Community engagement	MNRE - DEC
	POPs Inventory Trainings conducted (2.2.2.3)	Inventory trainings conducted	Conducted by end of 2017/18	Ongoing	Training reports Division reports	• Availability of resources • Strong collaboration	MNRE - DEC
	Effective monitoring processes and infrastructures in place (2.2.2.4-5/7/9-11)	Monitoring processes and infrastructures in place	100% established by end of NESP period	Existing to be consolidated	Monitoring manual Infrastructure/ equipment in place	• Availability of resources • Strong collaboration • Institutional capacity	MNRE - DEC MNRE - MET MOH MOR MAF
		Tracking system operational	By end of 2018/19	Nil	Tracking system	• Staff capacity • Availability of resources	MNRE - DEC/MET
	Chemicals and hazardous waste collection and disposal services provided (2.2.2.6)	Collection scheme for chemicals and hazardous waste	Operational by end of NESP period	Nil	Cabinet approval MOF Budget Collection contracts	• Availability of resources • Private sector support • Community engagement	MNRE - DEC MOF MPMC MAF
		Disposal and storage facilities established	By end of 2019/20	Nil	Cabinet approval Site visits	• Availability of resources • Institutional capacity	MNRE - DEC MOF MAF
	Increased compliance with Pesticides Act and Regulations (2.2.2.12 /ASP 4.2.1)	100% Compliance with Pesticides Act and Regulations	Annual compliance rate pa	Existing to be consolidated	Division progress reports	• Availability of resources • Community engagement • Private sector support	MAF- QUARANTINE MNRE - DEC
	Agricultural chemical users trained and certified (2.2.2.13/ASP 4.2.2)	100% of agricultural chemical users trained & certified	Number of users trained and certified pa	Existing to be consolidated	Training reports Registry of certified users	• Availability of resources • Community engagement • Private sector support	MAF - QUARANTINE
Activity 2.2.3 Promote wider awareness and education on chemicals and hazardous waste	Public awareness programs conducted (2.2.3.1-3)	Number of awareness programs conducted	Number of programs conducted pa	Ongoing	Division progress reports	• Availability of resources • Community engagement	MNR - DEC, MAF, MOH, MOR

Table 46: ESPO 2.3 : Costed Action Plan 2017-2021.

Long Term Outcome (LTO) 2 - More Sustainable and Resilient Built Environment								
End of Sector Plan Outcomes (ESPO) 2.3 Management of wastewater improved								
ACTIVITIES	SUB-ACTIVITIES	YEAR AND COST OF IMPLEMENTATION					TOTAL	IMPLEMENTING PARTNERS
		FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21		
Activity 2.3.1 Strengthen Policy and Regulatory Framework for Sanitation	2.3.1.1 Enhance PUMA's institutional capacity to implement the national sanitation policy	\$4,000.00	\$180,300.00	\$139,009.00	\$247,979.27	\$257,218.65	\$828,506.92	MNRE - PUMA WSCU /MWTI, MOH
	2.3.1.2 Review and update National Sanitation Policy		\$50,000.00				\$50,000.00	MNRE - PUMA, MOH, MWTI, SWA, MWCSO, PAS, IWSA
	2.3.1.3 Develop and enforce National Effluent Standards	\$170,000.00					\$170,000.00	MNRE - PUMA/WSCU, MOH, MWTI, SWA, PAS, SPREP
	2.3.1.4 Develop a Regulation on collection, transportation, use, disposal and treatment of wastewater sludge			\$100,000.00			\$100,000.00	MNRE-PUMA/DEC/WSCU, MOH, MWTI, MWCSO
	Sanitation Policy and Regulatory	\$174,000.00	\$230,300.00	\$239,009.00	\$247,979.27	\$257,218.65	\$1,148,506.92	
Activity 2.3.2 Increase compliance with approved sanitation standards	2.3.2.1 Monitor compliance with approved septic tank standards as specified in the national building code	\$16,000.00	\$58,210.00	\$59,926.30	\$61,724.09	\$63,576.00	\$259,436.39	MWTI, MNRE - WSCU/PUMA, PAS, MOH
	2.3.2.2 Enforce and monitor the Code of Environmental Practice for Odour Control	\$3,439.00	\$3,439.00	\$3,439.00	\$3,439.00	\$3,439.00	\$17,195.00	MNRE - PUMA, MOH, MWTI
	2.3.2.3 Conduct annual Urban Sanitation Surveys to assess level of compliance and build database of longer terms trends (since 2010)	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$125,000.00	MNRE - PUMA, MOH, MWTI, MWCSO, PAS, IWSA
	2.3.2.4 Conduct assessments to determine level of contamination from dysfunctional sanitation facilities and selected coastal springs	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$50,000.00	MNRE - PUMA WSCU /MWTI, MOH
	2.3.2.5 Establish and manage registry of all certified plumbers	\$40,000.00	\$100,000.00	\$100,000.00	\$100,000.00	\$100,000.00	\$440,000.00	PAS, MNRE PUMA /WSCU, MWTI
	2.3.2.6 Implement Sanitation MOU to coordinate shared enforcement of sanitation related regulatory functions including sharing of information/data	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$25,000.00	MNRE - PUMA
	2.3.2.7 Develop new technologies / solutions to resolving problematic sanitation/waste water systems							
	2.3.2.8 Target the ANM programme to increase public awareness and utilize as a tool for data collection nationwide	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$25,000.00	MWCSO, MNRE - PUMA, MOH, MWTI
	2.3.2.9 Strengthen political advocacy related issues through the SPAGL as a mechanism to promote public health and safe environment	\$45,000.00	\$100,000.00	\$103,000.00	\$106,090.00	\$109,180.00	\$463,270.00	MOH
	Compliance Monitoring Sub-total	\$149,439.00	\$306,649.00	\$311,365.30	\$316,253.09	\$321,195.00	\$1,404,901.39	
Activity 2.3.3 Strengthen management of sanitation and wastewater facilities	2.3.3.1 Increase public awareness through annual commemoration of the National Sanitation Day	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$100,000.00	MNRE-DEC, MWTI, LTA, MOH, SWA, IWSA, PAS
	2.3.3.2 Install geomembrane for Vaiaata sludge facility to reduce contamination of the groundwater resources	\$1,000,000.00					\$1,000,000.00	MNRE-DEC/PUMA/WSCU, MWTI
	2.3.3.3 Monitor environmental impacts of existing Sludge Facilities	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$25,000.00	MNRE - DEC/WSCU/WRD, SROS
	2.3.3.4 Undertake technical and operational maintenance of existing sludge facilities							
	2.3.3.5 Explore feasible options for additional sludge treatment facilities				\$100,000.00	\$500,000.00	\$600,000.00	MNRE-DEC/WSCU, MOF
	2.3.3.6 Manage and monitor maintenance contracts for Public Toilets	\$309,000.00	\$377,204.00	\$377,204.00	\$377,204.00	\$377,204.00	\$1,817,816.00	MNRE - DEC/WSCU, OAG, MOF, TENDERS BOARD
	2.3.3.7 Manage and monitor Sludge Maintenance Contracts for Upolu and Savaii	\$180,000.00	\$180,000.00	\$180,000.00	\$180,000.00	\$180,000.00	\$900,000.00	MNRE - DEC/LEGAL/WSCU, MOF
	2.3.3.8 Construct environmentally friendly Garden Toilets in partnership with STA	\$100,000.00	\$100,000.00	\$100,000.00	\$100,000.00	\$100,000.00	\$500,000.00	STA, MNRE - WSCU/PUMA/DEC
	2.3.3.9 Improve management of SWA's wastewater treatment plant	\$1,200,000.00	\$1,236,000.00	\$1,273,080.00	\$1,311,272.40	\$1,350,610.57	\$6,370,962.97	
	Sludge Treatment Facilities Sub-total	\$2,814,000.00	\$1,918,204.00	\$1,955,284.00	\$2,093,476.40	\$2,532,814.57	\$11,313,778.97	
	GRAND TOTAL	\$3,137,439.00	\$2,455,153.00	\$2,505,658.30	\$2,657,708.76	\$3,111,228.22	\$13,867,187.28	

Table 47: ESPO 2.3 : MTEF 2017-2021.

ESPO 2.3 MTEF						
NESP Period	Recurrent	Investment	Secured		Shortfall	
			Recurrent	Investment	Recurrent	Investment
2016/17	\$1,341,194.00	\$2,635,000.00	\$1,341,194.00	\$2,635,000.00	\$0.00	\$0.00
2017/18	\$1,405,398.00	\$1,884,510.00	\$1,405,398.00	\$1,884,510.00	\$0.00	\$0.00
2018/19	\$626,751.00	\$1,977,811.30	\$626,751.00	\$1,977,811.30	\$0.00	\$0.00
2019/20	\$626,751.00	\$2,129,861.76	\$626,751.00	\$2,029,861.76	\$0.00	\$100,000.00
2020/21	\$626,751.00	\$2,583,381.22	\$626,751.00	\$2,083,381.22	\$0.00	\$500,000.00
SUB-TOTAL	\$4,626,845.00	\$11,210,564.28	\$4,626,845.00	\$10,610,564.28	\$0.00	\$600,000.00
TOTAL	\$15,837,409.28		\$15,237,409.28		\$600,000.00	

Table 48: ESPO 2.3 : Performance Management Framework 2017-2021 (Part I).

ESPO 2.3	Outputs	Performance Indicator	Target	Baseline (2015)	Means of Verification	Assumptions	Lead IA(s)
Activity 2.3.1 Strengthen Policy and Regulatory Framework for Sanitation	Institutional capacity for wastewater/sanitation management enhanced (2.3.1.1)	Enhanced institutional capacity	Enhanced institutional capacity	Ongoing	Approved budget support Project funding	- Political support - Availability of resources - Strong collaboration	MNRE - PUMA MOF WSCU MPMC
	National Sanitation Policy approved by Cabinet (2.3.1.2)	National Sanitation Policy approved by Cabinet	By end of 2017/18	New	Cabinet directive (FK)	Political support	MNRE - PUMA MPMC
	National effluent standards developed (2.3.1.3)	National effluent standards developed	By end of 2016/17	New	Approved standards	Strong collaboration	MNRE - PUMA
	Regulations on collection, transportation, disposal, use and treatment of sludge developed (2.3.1.4)	Regulations in place	By end 2018/19	New	Regulations	- Availability of resources - Strong collaboration - Political support - Community engagement	MNRE - PUMA /LEGAL
Activity 2.3.2 Increase compliance with approved sanitation standards	Increased compliance with approved septic tank standards targeting the AUA (2.3.2.1/2.3.2.3-4)	% compliance with approved septic tank standards	Annual compliance rate	Existing to be consolidated	Survey report	- Availability of resources - Strong collaboration - Community engagement - Institutional capacity	MNRE PUMA MWTI PAS SBS
	Increased compliance with the Code of Environmental Practice on Odour Control (2.3.2.2)	Number of cases reported	Number of cases reported annually	Existing to be consolidated	Division progress report	- Institutional capacity - Community engagement	MNRE - PUMA
	Number of certified Plumbers increased (2.3.2.5)	Number of Plumbers certified	Number of plumbers certified annually	Existing to be consolidated	Plumbers registry	- Strong collaboration - Community engagement	PAS
	Sanitation MOU implemented (2.3.2.6/8-9)	Number of coordinated activities implemented under the MOU	Number of coordinated activities under the MOU pa	Existing to be consolidated	Sector/Division progress reports	- Strong collaboration - Institutional capacity - Community engagement	MNRE - PUMA MOH MWTI
		Number of SPAGL programs conducted	Number programs conducted pa	Ongoing	Sector/Division progress reports	- Political support - Availability of resources - Community engagement	MOH

Continuation of Table 48: ESPO 2.3 : Performance Management Framework 2017-2021 (Part II).

ESPO 2.3	Outputs	Performance Indicator	Target	Baseline (2015)	Means of Verification	Assumptions	Lead IA(s)
Activity 2.3.3 Strengthen management of sanitation and wastewater facilities	Public awareness programs conducted (2.3.3.1)	Annual commemoration of National Toilet Day	Annual National Toilet Day	Ongoing	Sector/Division progress reports	- Political support - Availability of resources - Community engagement	MNRE - PUMA /WSCU MOH STA
	Environmental impacts from sludge facilities monitored (2.3.3.2-3)	Geo-membrane installed under the sludge ponds	By end of 2016/17	New	Division reports	- Availability of resources - Availability of data - Institutional capacity	MNRE - DEC
	Feasibility of additional sludge facilities explored (2.3.3.5)	Feasibility study developed	By end of NESP period	New	Feasibility study report	- Availability of resources - Availability of data	MNRE - DEC
	Public toilet facilities maintained and in good condition (2.3.3.6)	Public toilets maintained and kept in good condition	Annual maintenance contracts	Ongoing	Maintenance contracts	- Availability of resources - Monitoring capacity - Private sector support	MNRE - DEC
	Sludge treatment facilities maintained (2.3.3.7/4)	Sludge treatment facilities maintained	Annual maintenance	Ongoing	Maintenance contracts	- Availability of resources - Monitoring capacity - Private sector support	MNRE - DEC
	Environmentally friendly sanitation facilities piloted and rolled out (2.3.3.8)	Number garden toilet facilities constructed	Garden toilets constructed	2 garden toilets	Site visit reports	- Availability of resources - Community engagement	STA
	Wastewater Treatment Plant managed effectively (2.3.3.9)	Length of sewer lines extended	By end of NESP period	Existing to be consolidated	Design reports Works contract	Availability of resources	SWA
		Number of connections	By end of NESP period		SWA annual reports	Affordability of services	SWA
		Number of public complaints reported	Number of complaints reported	Annually	Division progress reports	- Community engagement - Complaints are reported and documented	SWA
		Compliance with effluent standards	% compliance	Annually	Division progress reports	- Availability of resources - Availability of data - Institutional capacity	SWA MNRE SROS MOH

Table 49: ESPO 2.4 : Costed Action Plan 2017-2021.

Long Term Outcome (LTO) 2 - More Sustainable and Resilient Built Environment								
End of Sector Plan Outcomes (ESPO) 2.4 Low carbon developments through energy efficiency and renewable energy increased								
ACTIVITIES	SUB-ACTIVITIES	YEAR AND COST OF IMPLEMENTATION (SAT)					TOTAL	IMPLEMENTING PARTNERS
		FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21		
Activity 2.4.1 Strengthen policy, legislative and institutional framework for low carbon developments	2.4.1.1 Develop NAMA	100,000.00					100,000.00	MNRE-RED,LTA, MOF,SROS
	2.4.1.2 Develop policy on greater Energy Efficiency on Transport Sector			60,000.00	50,000.00	50,000.00	160,000.00	MNRE-RED,LTA,MOF,MfR, MCIL, Private Companies [Car Dealers]
	2.4.1.3 Develop Energy Efficiency Policy for Electricity Sector			60,000.00	50,000.00	50,000.00	160,000.00	MNRE-RED,EPC, IPP, MoF
	2.4.1.4 Develop Renewable Energy Act			100,000.00	100,000.00	50,000.00	250,000.00	MNRE - RED
	2.4.1.5 Develop a Renewable Energy Registry for all the renewable energy projects implemented in Samoa	50,000.00					50,000.00	MNRE-RED,EPC, IPP, MoF,UNDP,
	2.4.1.6* Review the current GHG Abatement Strategy through energy efficiency in the transport, building, energy (electricity) sectors including through biomass in household cooking		80,000.00				80,000.00	MNRE-RED , MOF, MWTI, LTA, Sector IAs , DPs
	2.4.1.7 Develop and formulate GHG Abatement Strategy for 2019-2029			50,000.00	50,000.00	50,000.00	150,000.00	MNRE-RED, MOF, MWTI, LTA, EPC, DPs
	2.4.1.8 Strengthen RED institutional structure and role with a set Output Budget			80,000.00	80,000.00	80,000.00	240,000.00	MNRE-RED, PSC
	2.4.1.9 Enforce the eight NGHGS priority areas to maximize reduction of greenhouse gas emissions		50,000.00	50,000.00	50,000.00	50,000.00	200,000.00	MNRE-RED,LTA,EPC
	Policy, Planning and Legislative Framework Sub-total	\$150,000.00	\$130,000.00	\$400,000.00	\$380,000.00	\$330,000.00	\$1,390,000.00	
Activity 2.4.2 Promote Research and Development on alternative energy sources and energy efficiency	2.4.2.1 Investigate and promote new sources of renewable energy, e.g. Biomass		1,500,000.00	1,500,000.00			\$3,000,000.00	MNRE-RED, STEC
	2.4.2.2 Promote the replacement of fossil fuel with bio-fuel			250,000.00	250,000.00		\$500,000.00	MNRE-RED, EPC, MOF, SROS
	2.4.2.3 Support and encourage local research into alternative and renewable energy sources	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00	\$100,000.00	MNRE-RED, Academic Institutions, NGOs, DPs
	2.4.2.4 Promote Waste-to-Energy (WTE) initiatives towards an environmentally clean environment with key stakeholders			200,000.00	200,000.00	0.00	\$400,000.00	MNRE - RED, DEC,SWA-Wastewater, Academic
	2.4.2.5 Promote the use of biogas digesters as an alternative onsite waste management system in appropriate settings	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00	\$250,000.00	MNRE- RED, NGOs, Communities, DPs
	2.4.2.6 Design and construct a model "green building" suitable for Samoa		100,000.00	50,000.00	50,000.00	50,000.00	\$250,000.00	MNRE-RED,MWTI,
	Research and Development Sub-total	\$70,000.00	\$1,670,000.00	\$2,070,000.00	\$570,000.00	\$120,000.00	\$4,500,000.00	
Activity 2.4.3 Promote Partnership on energy efficiency and renewable energy	2.4.3.1 Encourage partnership with the private sector to promote low carbon tools		10,000.00	10,000.00	10,000.00		\$30,000.00	MNRE-RED, Private Sector, Academic Institutions
	2.4.3.2 Support public and private investment through provision of information and data in renewable energy generation		5,000.00	5,000.00	5,000.00	5,000.00	\$20,000.00	MNRE - RED
	2.4.3.3 Promote the import energy efficient commercial / industrial and household technologies	25,000.00	25,000.00	25,000.00	25,000.00	0.00	100,000.00	MNRE, Private Companies
	Partnership Sub-total	\$25,000.00	\$40,000.00	\$40,000.00	\$40,000.00	\$5,000.00	\$150,000.00	
Activity 2.4.4 Promote wider awareness and educational programs on EE and RE	2.4.4.1 Provide wider awareness programmes to schools, private sector, communities, etc promoting simple and practical tools to low carbon development	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	\$50,000.00	MNRE-RED,UNDP,MESC,
	2.4.4.2 Promote and encourage energy conservation and efficient energy use especially in government offices/ departments			50,000.00			\$50,000.00	MNRE-RED, MOF, MWTI
	2.4.4.3 Support Government initiatives to achieve the national target of 100% renewable electricity by 2020	100,000.00					\$100,000.00	MNRE-RED, EPC, UNDP, MOF,SROS,STEC
	2.4.4.4 Public acceptance of energy conservation household educational programs and other means including the use of incentives						\$0.00	MNRE - RED, MESC, Communities
	2.4.4.5 Promote renewable energy and energy efficiency in the National Construction Code [NCC]						\$0.00	MNRE - RED. MWTI
	2.4.4.6 Promote co-benefits for mitigation and transformation to more sustainable development paths through EE and RE especially in the transport sector		100,000.00	100,000.00			200,000.00	MNRE - RED, MWTI, LTA
	Awareness and Educational Sub-total	\$110,000.00	\$110,000.00	\$160,000.00	\$10,000.00	\$10,000.00	\$400,000.00	
	GRAND TOTAL	\$355,000.00	\$1,950,000.00	\$2,670,000.00	\$1,000,000.00	\$465,000.00	\$6,440,000.00	

Table 50: ESPO 2.4 : MTEF 2017-2021.

ESPO 2.4 MTEF						
NESP Period	Recurrent	Investment	Secured		Shortfall	
			Recurrent	Investment	Recurrent	Investment
2016/17	\$209,211.40	\$475,000.00	\$209,211.40	\$450,000.00	\$0.00	\$25,000.00
2017/18	\$214,211.40	\$2,065,000.00	\$209,211.40	\$1,710,000.00	\$5,000.00	\$355,000.00
2018/19	\$294,211.40	\$2,705,000.00	\$209,211.40	\$1,710,000.00	\$85,000.00	\$995,000.00
2019/20	\$294,211.40	\$915,000.00	\$209,211.40	\$90,000.00	\$85,000.00	\$825,000.00
2020/21	\$294,211.40	\$380,000.00	\$209,211.40	\$80,000.00	\$85,000.00	\$300,000.00
SUB-TOTAL	\$1,306,057.00	\$6,540,000.00	\$1,046,057.00	\$4,040,000.00	\$260,000.00	\$2,500,000.00
TOTAL	\$7,846,057.00		\$5,086,057.00		\$2,760,000.00	

Table 51: ESPO 2.4 : Performance Management Framework 2017-2021.

ESPO 2.4	Outputs	Performance Indicator	Target	Baseline (2015)	Means of Verification	Assumptions	Responsible IA
Activity 2.4.2 Promote Research and Development on alternative energy sources and energy efficiency	Alternative sources of renewable energy piloted (2.4.2.1-2/3-6)	Feasibility of new sources of renewable researched	By end of NESP period	Existing to be consolidated	Feasibility studies	• Availability of resources • Availability of data • Strong collaboration • Community engagement	MNRE - RED /GEF SROS STEC MOF EPC
		Number of pilots /trials successful	By end of NESP period	Existing to be consolidated			
		Model Green Building constructed	By end of NESP period	Nil	Building	• Availability of resources • Political support	MNRE- RED MOF MWTI
		Increased use of bio-fuel	Volume of bio-fuel used pa	Existing to be consolidated	Division progress reports	• Availability of resources • Availability of data • Sufficient supply of biofuel	MNRE - RED MOF SROS EPC
Activity 2.4.3 Promote Partnership on energy efficiency and renewable energy	Partnership for low carbon tools established (2.4.3.1-3)	Number of partnerships established	Number of MOUs signed by end of NESP period	Existing to be consolidated	Signed MOUs	• Availability of resources • Private Sector Support • Political support	MNRE - RE MOF EPC COC
		Number of new technologies being used	By end of NESP period	Existing to be consolidated	Technologies in use Division reports	• Availability of resources • Private sector support • Technical capacity	MNRE - RED MOF EPC COC
Activity 2.4.4 Promote wider awareness and educational programs on EE and RE	Extensive public awareness programs conducted (2.4.4.1)	Number & type of awareness programs conducted	Annual programs conducted	Ongoing	Awareness reports Division reports	• Availability of resources • Community engagement • Private Sector support	MNRE - RED MOF EPC COC MWCSO
	Energy efficient government buildings promoted (2.4.4.2/4-5)	Number of energy efficient buildings	Number of energy efficient building pa	Existing to be consolidated	Division progress reports	• Availability of resources • Strong collaboration • Political support	MNRE - RED MOF MPMC
		Energy efficiency standards integrated in national building code	By end of NESP period	New	New National Building Code	• Strong collaboration • Private sector support • Community engagement	MNRE - RED MWTI MOF
	100% renewable electricity achieved (2.4.4.3)	% renewable electricity by 2025	% renewable electricity by end of NESP period	Existing to be consolidated	Division progress reports	• Availability of resources • Strong collaboration • Private Sector support	MNRE - RED EPC MOF OOTR
		Number of agreements signed	By end of NESP period	Existing to be consolidated	Signed agreements	• Strong collaboration • Private Sector support	MNRE - RED EPC MOF OOTR
	Energy efficiency and renewable energy promoted in the transport sector (2.4.4.6)	Number of vehicles using bio-diesel	Number of vehicles using biodiesel pa	Existing to be consolidated	Division reports Vehicles	• Private sector support • Sufficient supply of biodiesel	MNRE - RED SROS

Table 52: ESPO 2.5 : Costed Action Plan 2017-2021.

Long Term Outcome (LTO) 2 - More Sustainable and Resilient Built Environment								
End of Sector Plan Outcomes (ESPO)	2.5 Sustainable development planning and environmental monitoring improved	YEAR AND COST OF IMPLEMENTATION					TOTAL	IMPLEMENTING PARTNERS
ACTIVITIES	SUB-ACTIVITIES	(SAT)						
		FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21		
Activity 2.5.1 Strengthen regulatory systems to support sustainable planning and development	2.5.1.1 Amend the PUM Act 2004 (inclusive of consultations, and Parliament approval)		\$5,000.00	\$5,000.00	\$1,000.00	\$1,000.00	\$12,000.00	MNRE PUMA, Legal and OAG
	2.5.1.2 Identify required Regulations, including consultations and approvals of the Notification Regulation and the Exempt Development Regulation		\$3,000.00	\$3,000.00			\$6,000.00	MNRE PUMA, Legal and OAG
	2.5.1.3 Facilitate the Development Consent Application process - register, assess and review DCAs including notification, referrals, site assessments, research, reporting &	\$4,000.00	\$4,000.00	\$4,000.00	\$4,000.00	\$4,000.00	\$20,000.00	MNRE PUMA, MNRE Divisions and relevant IAs
	2.5.1.4 Strengthen procedures for the development consent application process	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$5,000.00	MNRE PUMA
	2.5.1.5 Coordinate land use activities with relevant Agencies and respective divisions of MNRE	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$5,000.00	MNRE PUMA and MNRE DIVISIONS
	2.5.1.6 Register and investigate public complaints received regarding developments	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$5,000.00	MNRE PUMA
	2.5.1.7 Monitor and enforce compliance to Environmental and Social Safeguards	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$10,000.00	MNRE PUMA, relevant IAs
	2.5.1.8 Implement awareness activities to inform the public about land use / land resource issues and the impacts of unsustainable developments	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$25,000.00	MNRE PUMA
	2.5.1.9 Maintain the Development Consent Application and Monitoring Database	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$5,000.00	MNRE PUMA
	2.5.1.10 Develop and implement new tools and technologies to improve capacity of staff when assessing, monitoring land use	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$15,000.00	MNRE PUMA
Sustainable Planning and Development Sub-total		\$18,000.00	\$26,000.00	\$26,000.00	\$19,000.00	\$19,000.00	\$108,000.00	
Activity 2.5.2 Implement appropriate tools and procedures to facilitate strategic planning and development	2.5.2.1 Review and revise existing policies and develop new policies to support the PUM Act	\$3,000.00	\$53,000.00	\$53,000.00	\$53,000.00	\$53,000.00	\$215,000.00	MNRE PUMA
	2.5.2.2 Identify and develop sustainable management plans; including the Apia Greater Area SMP		\$52,000.00	\$52,000.00	\$52,000.00	\$52,000.00	\$208,000.00	MNRE PUMA
	2.5.2.3 Develop planning provisions as required under the PUM Act	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$5,000.00	MNRE PUMA, Legal and OAG
	2.5.2.4 Implement the Vaitele Sustainable Mangement plan,	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$5,000.00	MNRE PUMA
	2.5.2.5 Implement the Apia Waterfront Plan	\$1,000,000.00	\$15,000,000.00	\$10,000,000.00	\$5,000,000.00	\$1,000,000.00	\$32,000,000.00	MNRE PUMA, relevant IAs
	2.5.2.6 Revise, Implement and monitor the District Community Integrated Management Plans	\$3,000,000.00	\$1,000,000.00	\$1,000,000.00	\$1,000,000.00	\$1,000,000.00	\$7,000,000.00	MNRE PUMA, relevant IAs
	2.5.2.7 Implement the Apia City Spatial Plan		\$30,000.00	\$30,000.00	\$30,000.00	\$30,000.00	\$120,000.00	MNRE PUMA, relevant IAs
	2.5.2.8 Implement the PPCR project to completion	\$1,000,000.00	\$8,000,000.00	\$1,000,000.00			\$10,000,000.00	MNRE PUMA, relevant IAs
	2.5.2.9 Implement the AF project to completion	\$1,000,000.00	\$5,000,000.00				\$6,000,000.00	MNRE PUMA, relevant IAs
	2.5.2.10 Conduct public awareness activities on planning policies and on the role of	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$15,000.00	MNRE PUMA
	2.5.2.11 Conduct internal trainings for staff development	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$5,000.00	MNRE PUMA
	2.5.2.12 Provide secretariat services to the Planning and Urban Management Board	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$5,000.00	MNRE PUMA
Strategic Planning and Development Sub-total		\$6,010,000.00	\$29,142,000.00	\$12,142,000.00	\$6,142,000.00	\$2,142,000.00	\$55,578,000.00	
Activity 2.5.3 Provide effective urban management services to support sustainable planning and development	2.5.3.1 Register and investigate public complaints relating to amenity issues	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$5,000.00	MNRE PUMA
	2.5.3.2 Review and strengthen complaints resolution services	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$5,000.00	MNRE PUMA
	2.5.3.3 Develop compliance monitoring and enforcement strategy relating to amenity issues	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$5,000.00	MNRE PUMA
	2.5.3.4 Monitor urban public amenities, facilities, and spaces for improved management and urban planning designs	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$5,000.00	MNRE PUMA
	2.5.3.5 Monitor the use of plastic septic tanks procured under Community Sanitation Project	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$5,000.00	MNRE PUMA
	2.5.3.6 Conduct surveys to monitor environmental conditions in urban Apia and the Vaitele Industrial area		\$204,000.00	\$200,000.00	\$200,000.00	\$200,000.00	\$804,000.00	MNRE PUMA and the Water Sector
	2.5.3.7 Identify new engineering solutions to resolve amenity and environmental impacts		\$30,000.00	\$30,000.00	\$30,000.00	\$30,000.00	\$120,000.00	MNRE PUMA and the Water Sector
Urban Management Planning Sub-total		\$5,000.00	\$239,000.00	\$235,000.00	\$235,000.00	\$235,000.00	\$949,000.00	
Grand total		\$6,033,000.00	\$29,407,000.00	\$12,403,000.00	\$6,396,000.00	\$2,396,000.00	\$56,635,000.00	

Table 53: ESPO 2.5 : MTEF 2017-2021.

ESPO 2.5 MTEF						
NESP Period	Recurrent	Investment	Secured		Shortfall	
			Recurrent	Investment	Recurrent	Investment
2016/17	\$823,602.00	\$6,000,000.00	\$823,602.00	\$6,000,000.00	\$0.00	\$0.00
2017/18	\$823,602.00	\$29,364,000.00	\$823,602.00	\$19,244,000.00	\$0.00	\$10,120,000.00
2018/19	\$823,602.00	\$12,360,000.00	\$823,602.00	\$4,240,000.00	\$0.00	\$8,120,000.00
2019/20	\$823,602.00	\$6,360,000.00	\$823,602.00	\$2,740,000.00	\$0.00	\$3,620,000.00
2020/21	\$823,602.00	\$2,360,000.00	\$823,602.00	\$740,000.00	\$0.00	\$1,620,000.00
SUB-TOTAL	\$4,118,010.00	\$56,444,000.00	\$4,118,010.00	\$32,964,000.00	\$0.00	\$23,480,000.00
TOTAL	\$60,562,010.00		\$37,082,010.00		\$23,480,000.00	

Table 54: ESPO 2.5 : Performance Management Framework 2017-2021 (Part I).

ESPO 2.5	Outputs	Performance Indicator	Target	Baseline (2015)	Means of Verification	Assumptions	Lead IA(s)
Activity 2.5.1 Strengthen regulatory systems to support sustainable planning and development	PUMA Act 2004 amended (2.5.1.1)	PUMA Act 2004 amended	By end of 2018/19	PUMA Act 2004	Amendment to PUMA Act 2004	- Political support - Community engagement	MNRE - PUMA /LEGAL OAG
	Notifications and Exempt Development(2.5.1.2) Regulations developed	Regulations in place	By end of 2018/19	DC Regulations	Notification and Exempt Development Regulations	- Political support - Community engagement - Availability of resources	MNRE - PUMA /LEGAL OAG
	Number of Development Consents issued (2.5.1.3-6/9-10/2.5.2.11)	Number of DCs issued	Per annum	Existing to be consolidated	DC Database Division report	- Institutional capacity - Developers apply for DCs	MNRE - PUMA
		Number of public complaints received on developments	Number of complaints pa	Existing to be consolidated	Division progress reports	- Institutional capacity - Availability of staff	MNRE - PUMA
		Staff capacity increased	Number of staff trained	Existing to be consolidated	Training reports Division reports	- Availability of resources - Availability of staff	MNRE - PUMA
	Environment & social safeguards monitored and enforced (2.5.1.7-8/2.5.2.10)	Number of stop orders issued	Number of stop orders pa	Existing to be consolidated	Division reports Stop orders	- Institutional capacity - Community engagement	MNRE - PUMA
		Number of awareness programs conducted	Number of programs pa	Existing to be consolidated	Division progress reports	Availability of resources	
Activity 2.5.2 Implement appropriate tools and procedures to facilitate strategic planning and development	New policies drafted to support PUM Act (2.5.2.1)	Number of policies developed	By end of NESP period	Existing to be consolidated	Policies in place Division progress reports	- Availability of resources - Political support - Community engagement	MNRE - PUMA
	Sustainable Management Plans developed (2.5.2.2)	Number of SMPs developed	By end of NESP period	Existing to be consolidated	SMPs Division reports	- Availability of resources - Community engagement	MNRE - PUMA
	Planning provisions required developed (2.5.2.3)	Number of planning provisions developed	By end of NESP period	Existing to be consolidated	Planning provisions in place	- Availability of resources - Political support - Community engagement	MNRE - PUMA
	Vaitele SMP implemented (2.5.2.4).	Extent of implementation	By end of NESP period	Existing to be consolidated	SMP Review Division reports	- Community engagement - Availability of resources	MNRE - PUMA
	Apia Waterfront Plan implemented (2.5.2.5)	Extent of implementation	By end of NESP period	Existing to be consolidated	AWP Review Division reports	- Availability of resources - Community engagement - Strong collaboration	MNRE - PUMA MWTI STA
	CIM Plans reviewed and updated (2.5.2.6a)	Number of CIM Plans reviewed and updated	Number of CIM Plans pa	Existing to be consolidated	Updated CIM Plans	- Availability of resources - Community engagement	MNRE - PUMA MNRE - PUMA
	CIM Plans (2.5.2.6b) implemented	Extent of implementation	By end of NESP period	Nil	Division progress reports	- Strong collaboration - Political support	MWTI SWA MNRE MAF

Continuation of Table 54: ESPO 2.5 : Performance Management Framework 2017-2021 (Part II).

ESPO 2.5	Outputs	Performance Indicator	Target	Baseline (2015)	Means of Verification	Assumptions	Lead IA(s)
Activity 2.5.2 Implement appropriate tools and procedures to facilitate strategic planning and development	Apia City Spatial Plan implemented (2.5.2.7)	Extent of implementation	By end of NESP	Existing to be consolidated	Division progress reports	• Availability of resources • Community engagement • Private Sector support • Strong collaboration • Political support	MNRE - PUMA Utilities MPMC MOF MWTI
	PPCR Project implemented and completed successfully (2.5.2.8)	100% completion of project deliverables	By end of 2018/19	Existing to be consolidated	Project progress reports Project terminal evaluation report	• Utilization of resources • Community engagement • Strong collaboration • Timely procurement	MNRE - PUMA KVA MOF WB
	Adaptation Fund Project implemented and completed successfully (2.5.2.9)	100% completion of project deliverables	By end of 2017/18	Existing to be consolidated	Project Terminal evaluation report	• Utilization of resources • Community engagement • Strong collaboration	MNRE - PUMA MOF UNDP
	Planning and Urban Management Board meetings conducted (2.5.2.12)	Number of Board meetings	Per annum	Existing to be consolidated	Minutes	• Availability of members	MNRE - PUMA
Activity 2.5.3 Provide effective urban management services to support sustainable planning and development	Public amenity issues identified and addressed (2.5.3.1-5)	Ratio of public complaints received against resolved cases	Ratio pa	Existing to be consolidated	Public complaints reports	• Availability of resources • Private sector support • Strong collaboration	MNRE - PUMA COC
		Compliance monitoring strategy in place	Number of amenity issue identified pa	Ongoing	Division progress reports	• Strong collaboration • Availability of resources	MNRE - PUMA
	Environmental monitoring surveys conducted for Apia Urban area and Vaitele industrial area (2.5.3.6)	Environmental surveys conducted	Surveys conducted annually	Existing to be consolidated	Survey reports	• Availability of resources • Community engagement • Private sector support	MNRE - PUMA
	New engineering solutions to resolve amenity issues identified (2.5.3.7)	New engineering solutions identified and applied	By end of NESP period	Existing to be consolidated	Engineering solutions identified	• Availability of resources • Community engagement • Private sector support	MNRE PUMA

Table 55: LTO 3 : Outcomes Map 2017-2021.

LONG TERM OUTCOME 3: Climate Change and Disaster Risk Management mainstreamed in all sectors				
END OF SECTOR PLAN OUTCOMES (ESPOs)				
3.1 Integration of climate change across all sectors improved	3.2 Public leadership, coordination, development and implementation of activities for disaster risk management improved	3.3 Meteorological, atmospheric and geo-scientific information and data improved		
OUTPUTS				
National Climate Policy updated	Disaster and Emergency Act 2007 reviewed	Signages in high risk areas installed	Meteorology Legislation in place Ozone Regulations reviewed	Recycling and recovery activities implemented
Climate Change legislation enacted	NDMP 2011-2014 reviewed and updated	Volcanic eruption study conducted for eastern coast of Savaii	National Atmospheric Policy developed National Deep Sea Policy developed	Certification system for refrigeration in place
National Climate Change Adaptation Strategy developed	DRM mainstreamed across all 14 sectors	Riskcape for Greater Apia area implemented	Weather stations maintained Weather and tide forecasts issued	Reports to Montreal Protocol prepared and submitted
National Adaptation Plan (NAP) developed	DRM Awareness and Training programs implemented	Coastal and riverbank protection measures implemented	Forecasting system maintained	Awareness programs on ODS conducted
Institutional arrangements for Climate Change strengthened	Quarterly meetings of the DAC conducted	PDNA Trainings conducted for sectors	Severe weather forecasting services (Radar) developed	Geotechnical information available
Access to climate finance increased	National risks standards developed	Gender sensitive and identified vulnerable groups preparedness and response arrangements and plans in place	Rainfall and Climate observation network managed effectively	Compliance and Safety Operation Standards Manual developed
Climate Change Tools mainstreamed	New NEOC Building and Warehousing facilities constructed	Public private partnerships established to improve disaster preparedness, response and recover	New climate early warning products / services available	Geological laboratory upgraded
New project proposals developed	Community disaster and climate risk program implemented	DRM Teachers Toolkit reviewed	Public awareness programs on climate variability and long term climate change conducted	Earthquake and Tsunami warnings issued
Climate Change projects managed effectively	Evacuation centres fully assessed	DRM Information Management System upgraded	Air Quality Monitoring Unit established Air Quality monitored	Geophysical stations maintained and calibrated regularly
	Effective multi-agency emergency communication system and siren network in place	Post disaster emergency meetings conducted	Effective licensing system in place	Geomagnetism observations undertaken
	National simulations conducted	DMO Planning and gap analysis exercises conducted	Consumption of Ozone Depleting substances monitored	Geo-hazard gaps identified and addressed
	Hazard and risk assessment for Mt. Vaea undertaken	Code of good refrigeration practices/standards/Procedures enforced		Geo-science hazard response plan developed
ACTIVITIES				
Activity 3.1.1 Strengthen Policy, Legislative and Institutional Framework for Climate Change	Activity 3.2.1 Strengthen Governance and Mainstreaming of DRM		Activity 3.3.1 Strengthen Policy, Legislative and Institutional Framework for Meteorological and Geo-Scientific Information and Data	
Activity 3.1.2 Ensure effective management of GEF programmes to facilitate the planning and preparation of project proposals and project synergies	Activity 3.2.2 Strengthen Community Risk Management		Activity 3.3.2 Improve quality and accuracy of weather services	
	Activity 3.2.3 Strengthen Disaster Management		Activity 3.3.3 Improve quality and accuracy of climate information and data	
Activity 3.1.3 Project Management & Cross Sector Coordination	Activity 3.2.4 Improve Knowledge, Information and Education in DRM		Activity 3.3.4 Reduce and control use of ODS	
			Activity 3.3.5 Conduct Geo-Scientific Observations and Investigations	

Table 56: ESPO 3.1 : Costed Action Plan 2017-2021.

Long Term Outcome (LTO) 3 - Climate Change and Disaster Risk Management mainstreamed across all sectors								
End of Sector Plan Outcomes (ESPO)	3.1 Strengthened integration of climate change across all sectors	YEAR AND COST OF IMPLEMENTATION					TOTAL	IMPLEMENTING PARTNERS
ACTIVITIES	SUB-ACTIVITIES	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21		
Activity 3.1.1 Strengthen Policy, Legislative and Institutional Framework for Climate Change	3.1.1.1 Update National Climate Change Policy		\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00	\$60,000.00	MNRE-GEF, Govt Ministries/ Corporations, Private Sector, Communities, NGOs
	3.1.1.2 Draft Climate Change Bill	\$100,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$300,000.00	MNRE-GEF/LEGAL, Govt Ministries/ Corporations, Private Sector, Communities, NGOs
	3.1.1.3 Develop a National Climate Change Adaptation Strategy		\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$80,000.00	MNRE-GEF, Govt Ministries/ Corporations, Private Sector, Communities, NGOs, IAs
	3.1.1.4 Draft National Adaptation Plan (NAP)		\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$200,000.00	MNRE-GEF, Govt Ministries/ Corporations, Private Sector, Communities, NGOs, IAs
	3.1.1.5 Integrate NAP and NAMA Goals into all Sector Plans and SDS	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$250,000.00	MNRE-GEF, Govt Ministries/ Corporations, Private Sector, Communities, NGOs
	3.1.1.6 Samoa's 3rd National Communication to UNFCCC on Climate Change			\$30,000.00	\$250,000.00	\$440,000.00	\$720,000.00	MNRE-GEF, Govt Ministries/ Corporations, Private Sector, Communities, NGOs
	3.1.1.7 Review Policy, Strategy and Plans after 3 years of implementation	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00	\$75,000.00	MNRE - GEF
	3.1.1.8 Implement institutional reforms to strengthen institutional arrangements to address impacts of climate change	\$171,947.00	\$171,947.00	\$171,947.00	\$171,947.00	\$171,947.00	\$859,735.00	MNRE - GEF/MNRE, MOF, PSC
	Policy, Legislative, Institutional Framework Sub-total	\$336,947.00	\$371,947.00	\$401,947.00	\$621,947.00	\$811,947.00	\$2,544,735.00	
Activity 3.1.2 Ensure effective management of GEF programmes to facilitate the planning and preparation of project proposals and project synergies	3.1.2.1 Increase access to climate change finance mechanisms (including loss and damage)	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$125,000.00	MNRE-GEF, Sector IAs
	3.1.2.2 Undertake research and provide policy advice on GEF Operations and funding opportunities	\$45,000.00	\$45,000.00	\$45,000.00	\$45,000.00	\$45,000.00	\$225,000.00	MNRE-GEF, Sector IAs
	3.1.2.3 Increase public understanding of GEF programmes and different levels of eligibility	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00	\$75,000.00	MNRE-GEF, Sector IAs
	3.1.2.4 Conduct national awareness of GEF focal areas and processes to access assistance	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$50,000.00	MNRE-GEF, Sector IAs
	3.1.2.5 Mainstream 50 or more CC tools	\$80,000.00	\$80,000.00	\$80,000.00	\$80,000.00	\$80,000.00	\$400,000.00	MNRE-GEF, Sector IAs
	3.1.2.6 Coordinate staging of GEF Projects and other Donor Funded Projects	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$100,000.00	MNRE-GEF, Sector IAs
	3.1.2.7 Prepare Facilitators TORs, costs estimates, and gross budgets to be identified collectively across all relevant projects per CC tool	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE-GEF, Sector IAs
	3.1.2.8 Coordinate with GEF Implementing Agencies, other donor agencies and potentially private sector consultants/facilitators	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE-GEF, Sector IAs
	3.1.2.9 Oversee private consultants in proposal preparations	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE-GEF, Sector IAs
	Access to Climate Change Finance	\$195,000.00	\$195,000.00	\$195,000.00	\$195,000.00	\$195,000.00	\$975,000.00	
Activity 3.1.3 Project Management & Cross Sector Coordination	3.1.3.1 Develop new project proposals	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$250,000.00	MNRE-GEF, Sector IAs
	3.1.3.2 Manage implementation of climate change projects (GEF, GCF etc)	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$50,000.00	MNRE - GEF, NSC
	a. LDCF Project Coordination	\$234,000.00	\$234,000.00	\$234,000.00	\$234,000.00	\$234,000.00	\$1,170,000.00	MNRE - GEF, NSC
	b. SMSMCL Project	\$335,000.00	\$335,000.00	\$335,000.00	\$335,000.00	\$335,000.00	\$1,675,000.00	MNRE - GEF/LMD, NSC
	c. ICCRITS Project	\$122,000.00	\$122,000.00				\$244,000.00	STA, MNRE - GEF, NSC
	d. RIO Project	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$250,000.00	MNRE - GEF/CORP.SERVICES, NSC
	e. FPAM Project						\$0.00	MNRE - FOR/GEF, NSC
	f. Small Grants Project (GEF)	\$160,000.00	\$160,000.00	\$160,000.00	\$160,000.00	\$160,000.00	\$800,000.00	SGP NSC
	g. GCF Valsigano Integrated Flood Management Project		\$76,800.00	\$76,800.00	\$76,800.00	\$76,800.00	\$307,200.00	MOF-CRICU/ MNRE - GEF, NSC
	Project Management Sub-total	\$961,000.00	\$1,037,800.00	\$915,800.00	\$915,800.00	\$915,800.00	\$4,746,200.00	
	GRAND TOTAL	\$1,492,947.00	\$1,604,747.00	\$1,512,747.00	\$1,732,747.00	\$1,922,747.00	\$8,265,935.00	

Table 57: ESPO 3.1 : MTEF 2017-2021.

ESPO 3.1 MTEF						
NESP Period	Recurrent	Investment	Secured		Shortfall	
			Recurrent	Investment	Recurrent	Investment
2016/17	\$266,437.00	\$1,321,182.00	\$99,490.00	\$1,059,000.00	\$166,947.00	\$262,182.00
2017/18	\$281,437.00	\$1,417,982.00	\$99,490.00	\$1,135,800.00	\$181,947.00	\$282,182.00
2018/19	\$281,437.00	\$1,325,982.00	\$99,490.00	\$1,043,800.00	\$181,947.00	\$282,182.00
2019/20	\$281,437.00	\$1,545,982.00	\$99,490.00	\$1,263,800.00	\$181,947.00	\$282,182.00
2020/21	\$281,437.00	\$1,735,982.00	\$99,490.00	\$1,013,800.00	\$181,947.00	\$722,182.00
SUB-TOTAL	\$1,392,185.00	\$7,347,110.00	\$497,450.00	\$5,516,200.00	\$894,735.00	\$1,830,910.00
TOTAL	\$8,739,295.00		\$6,013,650.00		\$2,725,645.00	

Table 58: ESPO 3.1 : Performance Management Framework 2017-2021.

ESPO 3.1	Outputs	Performance Indicator	Target	Baseline (2015)	Means of Verification	Assumptions	Lead IAs
Activity 3.1.1 Strengthen Policy, Legislative and Institutional Framework for Climate Change	National Climate Policy updated (3.1.1.1)	National Climate Change policy updated	By end of 2018/19	Nil	Updated policy framework in place	- Political support - Availability of resources - Strong collaboration - Community engagement	MNRE - GEF / CC MOF MFAT
	Climate Change legislation enacted (3.1.1.2)	Climate Change legislation enacted	By end of NESP period	Nil	Climate Change legislation	- Strong political support - Availability of resources - Strong collaboration - Community engagement	MNRE - GEF / CC / LEGAL OAG
	National Climate Change Adaptation Strategy developed (3.1.1.3)	Strategy developed	By end of 2019/20	Nil	Strategy document	- Availability of resources - Strong collaboration - Community engagement - Private sector support	MNRE - GEF / CC MOF MFAT COC
	National Adaptation Plan (NAP) developed (3.1.1.4)	NAP developed	By end of 2019/20	Nil	NAP document	- Availability of resources - Strong collaboration - Community engagement - Private sector support - Political support	MNRE - GEF / CC MOF COC MFAT
	Institutional arrangements for Climate Change strengthened (3.1.1.5)	Institutional arrangements in place and effective	By end of NESP period	Nil	Cabinet directives PSC Functional analysis MNRE institutional review report	- Political support - Availability of resources	MNRE - GEF / CC MOF MFAT
Activity 3.1.2 Ensure effective management of GEF programmes to facilitate the planning and preparation of project proposals and project synergies	Access to climate finance increased (3.1.2.1-4/6/8-9)	Number of project proposals approved	By end of NESP period	Existing to be consolidated	Signed project documents	- Technical support - Political support - Strong collaboration	MNRE - GEF MOF MFAT
		Awareness on GEF programmes / focal areas increased	Number of awareness programs conducted p.a	Ongoing	Division progress reports	- Availability of resources - Strong collaboration - Community engagement	MNRE - GEF MOF MFAT
	Climate Change Tools mainstreamed (3.1.2.5/7)	Number of CC tools mainstreamed	By end of NESP period	Existing to be consolidated	Division progress reports	- Availability of resources - strong collaboration - Community engagement	MNRE - GEF
Activity 3.1.3 Project Management & Cross Sector Coordination	New project proposals developed (3.1.3.1)	Number of project proposals developed	By end of NESP period	Existing to be consolidated	Project proposals	- Technical support - Strong collaboration - Community engagement	MNRE - GEF
	Climate Change projects managed effectively (3.1.3.2)	Projects managed successfully	By end of NESP period	Existing to be consolidated	Project Terminal reports	- Strong collaboration - Community engagement - Technical support - Staff capacity	MNRE - GEF

Table 59: ESPO 3.2 : Costed Action Plan 2017-2021 (Part I).

Long Term Outcome (LTO) 3 - Climate Change and Disaster Risk Management mainstreamed across all sectors								
End of Sector Plan Outcomes (ESPO)	3.2 Public leadership, coordination, development and implementation activities for climate and disaster resilience improved	YEAR AND COST OF IMPLEMENTATION					TOTAL	IMPLEMENTING PARTNERS
ACTIVITIES	SUB-ACTIVITIES	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21		
Activity 3.2.1 Strengthen Governance and Mainstreaming of DRM	3.2.1.1 Review Disaster and Emergency Act 2007,				\$80,000.00		\$80,000.00	MNRE - DMO/LEGAL/PUMA & DAC, AVID (Australia)
	3.2.1.2 Review and update NDMP 2011 - 2014	\$86,049.15				\$90,000.00	\$176,049.15	MNRE - DMO, SPC, DAC, Others
	3.2.1.3 Mainstream DRM across all 14 Sectors	\$58,583.25	\$500.00	\$500.00	\$500.00	\$60,000.00	\$120,083.25	MNRE - DMO, Sector Coordinators, SPC, DAC, ACC (DFAT)
	3.2.1.4 Implement NDMP awareness and training programs for all government agencies, civil society, NGOs, private sector and communities	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - DMO, DAC
	3.2.1.5 Undertake regular quarterly meetings of the DAC to monitor and review progress of NAP implementation	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$2,500.00	MNRE - DMO, DAC
	3.2.1.6 Finalise and integrate policies for PWD, women in village plans, response plans, etc	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - DMO, MWCS, DAC, UN Agencies, Other development partners
	3.2.1.7 Awareness campaigns on water resources, land management, village development, climate change/DRM.	\$89,042.60	\$34,000.00	\$34,000.00	\$34,000.00	\$34,000.00	\$225,042.60	MNRE - DMO, DAC
	3.2.1.8 Develop National Risk standards and training in standards, including inclusion in SOPs.		\$51,000.00				\$51,000.00	MNRE - DMO, DAC
	3.2.1.9 Construction of NEOC, including space for all DMO staff, warehousing facility.	\$832,998.38	\$7,000,000.00		\$25,500.00	\$0.00	\$7,858,498.38	MNRE - DMO, SPC, WB, NZ MCDEM
DRM Governance and Mainstreaming Sub-total		\$1,067,173.38	\$7,086,000.00	\$35,000.00	\$140,500.00	\$184,500.00	\$8,513,173.38	
Activity 3.2.2 Strengthen Community Risk Management	3.2.2.1 Implement the community disaster and climate risk management program	\$98,054.30	\$95,500.00	\$156,945.70	\$200,000.00	\$200,000.00	\$750,500.00	MNRE - DMO, FESA, Police, SRC, SLAC, FLO, MWCS, MAF, MoH, MWTI, MNRE-Met
	3.2.2.2 Assess structural and accommodation capacity of evacuation centres	\$1,500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$3,500.00	MNRE - DMO, MES, MWTI, SRC
	3.2.2.3 Strengthen response coordination through the construction of a new and fully furnished and equipped NEOC		\$34,000.00	\$17,000.00	\$20,000.00	\$20,000.00	\$91,000.00	MNRE-DMO, Sector Coordinators, DAC
	3.2.2.4 Strengthen preparedness, response, recovery by maintaining multi-agency emergency communication system and siren network and explore other means for earlywarning/alerting for all including people with disabilities/special needs	\$346,759.10	\$204,000.00	\$162,382.30	\$250,000.00	\$250,000.00	\$1,213,141.40	MNRE - DMO, FESA, Police (core group), SRC, LTA, SWA, NHS, SPCS, EPC
	3.2.2.5 Conduct and coordinate national simulations including public awareness	\$24,811.50	\$354,700.00	\$129,988.80	\$20,000.00	\$20,000.00	\$549,500.30	MNRE - DMO, Sector Coordinators, DAC
	3.2.2.6 Undertake a hazard and risk assessment for Mt. Vaea	\$9,893.40	\$0.00	\$0.00	\$0.00	\$0.00	\$9,893.40	MNRE - DMO, DAC
	3.2.2.7 Install signages in high risk areas	\$28,919.50	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$128,919.50	MNRE - DMO
	3.2.2.8 Implement CDCRM project activities, including village based mapping/household surveys.	\$258,300.00	\$25,000.00	\$300,000.00	\$300,000.00	\$0.00	\$883,300.00	MNRE - DMO, FESA, Police, SRC, SLAC, FLO, MWCS, MAF, MoH, MWTI, MNRE-Met
	3.2.2.9 Undertake Eastern Coast and Savaii, Volcanic eruption study				\$1,500,000.00	\$900,000.00	\$2,400,000.00	MNRE - DMO, DAC
	3.2.2.10 Implement RiskSCape (Exposure, Loss & Damage Modelling Tool) as part of the Integrated Watershed Mgt Program (Greater Apia)	\$1,631,063.30	\$1,486,979.80	\$1,033,025.40	\$1,500,000.00	\$1,500,000.00	\$7,151,068.50	MNRE - DMO, DAC
Sub-total		\$2,399,301.10	\$2,225,679.80	\$1,824,842.20	\$3,815,500.00	\$2,915,500.00	\$13,180,823.10	

Continuation of Table 59: ESPO 3.2 : Costed Action Plan 2017-2021 (Part II).

Long Term Outcome (LTO) 3 - Climate Change and Disaster Risk Management mainstreamed across all sectors								
End of Sector Plan Outcomes (ESPO)	3.2 Public leadership, coordination, development and implementation activities for climate and disaster resilience improved	YEAR AND COST OF IMPLEMENTATION					TOTAL	IMPLEMENTING PARTNERS
ACTIVITIES	SUB-ACTIVITIES	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21		
	3.2.2.11 Compile agency-specific manuals and update as required.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - DMO, Sector Coordinators, DAC, Sectors
	3.2.2.12 Conduct simulation exercises led by DMO to test agency response plans.	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$2,500.00	MNRE - DMO, Sector Coordinators, DAC, Sectors
	3.2.2.13 Implement coastal and riverbank protection measures				\$0.00	\$0.00	\$0.00	MNRE - DMO, MWTL, LTA, EPC, SWA, contractors
	3.2.2.14 Review, revise and implement CIM Plans				\$0.00	\$0.00	\$0.00	MNRE - PUMA
	3.2.2.15 Upgrade EWS (include backup power, PA, sirens). Monthly siren testing to ensure effectiveness. Daily checks of system.	\$5,000.00	\$1,000,000.00	\$500,000.00	\$150,000.00	\$150,000.00	\$1,805,000.00	MNRE - DMO/MET, FESA, Police, SPA, OoTR, Telco providers,
	3.2.2.16 Undertake CDCRM drills to test manual system (church bells).	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - DMO
	3.2.2.17 Install automated system.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - MET
	3.2.2.18 Continue site selection for further EWS.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - MET
	3.2.2.19 Initiate disability-inclusive warning system. Programmed & Installed digital radios in Response agencies and High Commissions (NZ and Aust), cyclone shelters. Database for EWS and ERN to record data.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - DMO/MET, DAC, NOLA
	3.2.2.20 Programming of ID of all ERNs connected to DMO repeater. Training Regional level (PREP)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Community Risk Management Sub-total		\$5,500.00	\$1,000,500.00	\$500,500.00	\$150,500.00	\$150,500.00	\$1,807,500.00	
Activity 3.2.3 Strengthen Disaster Management	3.2.3.1 Adapt and adopt PDNA methodology and conduct trainings and awareness for all sectors	\$0.00	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$200,000.00	MNRE - DMO, MOF, Sector Coordination Units/DAC
	3.2.3.2 Maintain and update knowledge management systems, and ensure that lessons learned, during and in the aftermath of emergencies and disasters are documented	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - DMO, Sector Coordination Units/DAC
	3.2.3.3 Strengthen capacity in all aspects of disaster management, including gender-sensitive disaster preparedness and response arrangements and plans for communities, while addressing the specific needs of vulnerable groups as aligned with national disaster management plan.	\$0.00	\$30,000.00	\$30,000.00	\$30,000.00	\$30,000.00	\$120,000.00	MNRE - DMO, MWCS, Sector Coordination Units/DAC
	3.2.3.4 Strengthen private-public sector partnerships to facilitate agreements in place prior to an emergency, and to stimulate knowledge sharing and innovative solutions for improving disaster preparedness, response and recovery	\$0.00	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$200,000.00	MNRE - DMO, Chamber of Commerce, Sector Coordination Units/DAC
	3.2.3.5 Facilitate sector needs and capacity mapping including an inventory of private sector resources and services that can be made available before and after a disaster to assist national response and recovery efforts.	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00	\$12,500.00	MNRE - DMO, Sector Coordinators, Sectors/DAC
Disaster Management Sub-total		\$2,500.00	\$132,500.00	\$132,500.00	\$132,500.00	\$132,500.00	\$532,500.00	
Activity 3.2.4 Improve Knowledge, Information and Education on DRM	3.2.4.1 Review effectiveness of Early Childhood, Primary and Secondary Schools of the DRM Teachers Toolkit	\$0.00	\$0.00	\$60,000.00	\$50,000.00	\$0.00	\$110,000.00	MNRE - DMO, MES, Education Sector, Schools
	3.2.4.2 Develop/update DRM information management systems (database, media and webpage - villages, response agencies, maps, plans etc	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - DMO, DAC
	3.2.4.3 Schedule meetings according to Post Disaster Emergencies	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - DMO, Sector Coordinators, Sectors/DAC
	3.2.4.4 Install shared drive in new NEOC Centre.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - DMO
	3.2.4.5 Schedule meetings and trainings during 'peacetimes' on responsibilities	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	3.2.4.6 Undertake annual DMO planning exercise to identify gaps for interventions	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - DMO
	3.2.4.7 Design new website. Social media strategy. Braille. Share "good news" stories - best practise building designs that withstand disaster. Raise awareness of MHEWS				\$200,000.00		\$200,000.00	MNRE - DMO, Sector Coordination Units/DAC
	3.2.4.8 Identification of partnerships. Completion of paperwork for research partnerships. Sharing of information with research partners. Completion of research by partner/s. Implementation of research findings by DMO, if deemed feasible. Potential publications in international peer reviewed journals	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	MNRE - DMO, NUS, Sectors/DAC
	3.2.4.9 Review of resource materials under existing DMO Resource Toolkit Project, includes evaluation under EDF10 project and CIP.				\$20,000.00	\$0.00	\$20,000.00	MNRE - DMO, Sectors/DAC
DRM Knowledge and Information		\$0.00	\$0.00	\$60,000.00	\$270,000.00	\$0.00	\$330,000.00	
GRAND TOTAL		\$3,474,474.48	\$10,444,679.80	\$2,552,842.20	\$4,509,000.00	\$3,383,000.00	\$24,363,996.48	

Table 60: ESPO 3.2 : MTEF 2017-2021.

ESPO 3.2 MTEF						
NESP Period	Recurrent	Investment	Secured Recurrent	Investment	Shortfall Recurrent	Investment
2016/17	\$763,405.00	\$3,469,474.48	\$763,405.00	\$3,469,474.48	\$0.00	\$0.00
2017/18	\$763,405.00	\$10,440,179.80	\$763,405.00	\$10,310,179.80	\$0.00	\$130,000.00
2018/19	\$758,005.00	\$2,548,342.20	\$758,005.00	\$2,358,342.20	\$0.00	\$190,000.00
2019/20	\$1,008,005.00	\$4,254,500.00	\$758,005.00	\$1,779,500.00	\$250,000.00	\$2,475,000.00
2020/21	\$1,008,005.00	\$3,129,000.00	\$758,005.00	\$34,000.00	\$250,000.00	\$3,095,000.00
SUB-TOTAL	\$4,300,825.00	\$23,841,496.48	\$3,800,825.00	\$17,951,496.48	\$500,000.00	\$5,890,000.00
TOTAL	\$28,142,321.48		\$21,752,321.48		\$6,390,000.00	

Table 61: ESPO 3.2 : Performance Management Framework 2017-2021 (Part I).

ESPO 3.2	Outputs	Performance Indicator	Target	Baseline (2015)	Means of Verification	Assumptions	Lead IAs
Activity 3.2.1 Strengthen Governance and Mainstreaming of DRM	Disaster and Emergency Act 2007 reviewed (3.2.1.1)	Disaster and Emergency Act 2007 reviewed	By end of 2019/20	2007 Act	Review report	• Availability of resources • Political support • Community engagement	MNRE - DMO / LEGAL OAG
	NDMP 2011-2014 reviewed and updated (3.2.1.2)	NDMP 2011-2014 reviewed and updated	By end of 2016/17	NDMP 2011 - 2014	Updated NDMP	• Availability of resources • Community engagement • Strong collaboration	MNRE - DMO ADR, SRCS All sectors
	DRM mainstreamed across all 14 sectors (3.2.1.3/6)	Number of Sectors mainstreaming DRM	14 Sectors by end of NESP period	Existing to be consolidated	14 Sector Plans with DRM mainstreamed	• Availability of resources • Technical support • Strong collaboration	MNRE - DMO
	DRM Awareness and Training programs implemented (3.2.1.4/7)	Number of awareness and training programs conducted	Number of programs conducted pa	Existing to be consolidated	Awareness & training reports	• Availability of resources • Strong collaboration • Community engagement	MNRE - DMO ADRA, SRCS MWCSO All sectors
	Quarterly meetings of the DAC conducted (3.2.1.5)	Number of meetings per year	4 meetings pa	Existing to be consolidated	Minutes	• Availability of members	MNRE - DMO
	National risks standards developed (3.2.1.8)	National risks standards developed	By end of 2017/18	Nil	National Risks Standards	• Availability of resources • Technical support • Strong collaboration	MNRE - DMO
		Training on standards conducted	By end of 2017/18	Nil	Training reports	• Availability of resources • Participation of stakeholders • Strong collaboration	MNRE - DMO
	New NEOC Building and Warehousing facilities constructed (3.2.1.9/3.2.2.3)	New NEOC building constructed	By end of 2017/18	NEOC Base	New NEOC building Site visit	• Availability of resources • Timely procurement of services and works • Strong collaboration	MNRE - DMO
		Warehouse facility constructed	By end of 2019/20	Nil	Warehousing facility	• Availability of resources	MNRE - DMO
Activity 3.2.2 Strengthen Community Risk Management	Community disaster and climate risk program implemented (3.2.2.1/8)	Extent of program implemented by end of NESP period	Number of activities implemented pa	Existing to be consolidated	Project report	• Community engagement • Strong collaboration	MNRE - DMO
	Evacuation centres fully assessed (3.2.2.2)	Number of evacuation centres with satisfactory structural and accommodation capacity	Structural and accommodation capacities of evacuation centres conducted	Existing to be consolidated	Assessment report Division progress reports	• Community engagement • strong collaboration	MNRE - DMO

Continuation of Table 61: ESPO 3.2 : Performance Management Framework 2017-2021 (Part II).

ESPO 3.2	Outputs	Performance Indicator	Target	Baseline (2015)	Means of Verification	Assumptions	Lead IAs
Activity 3.2.2 Strengthen Community Risk Management	Effective multi-agency emergency communication system and siren network in place (3.2.2.4/11/15-16/18-20)	Extent of coverage of siren network and communication system	Coverage of communication and siren network	Existing to be consolidated	Division progress report Network data available	• Availability of resources • Strong collaboration • Community engagement	MNRE - DMO
		Agency specific manuals developed	Number of manuals developed by end of NESP period	Existing to be consolidated	Manuals in place	• Availability of resources • Technical support • Strong collaboration	MNRE - DMO
		Early warning system tested and upgraded regularly	Number of tests and upgrades undertaken pa	Ongoing	Division progress reports	• Availability of resources • Staff capacity • Strong collaboration	MNRE - DMO
		New sites for early warning systems identified and integrated	By end of NESP period	Existing to be consolidated	Division progress reports	• Availability of resources • Strong collaboration • Community engagement	MNRE - DMO
		Community drills on manual systems undertaken	Number of drills pa	Existing to be consolidated	Division progress reports	• Community engagement	MNRE - DMO
	National simulations conducted (3.2.2.5/12)	Number of national simulations conducted by end of NESP period	Number of national simulations pa	Existing to be consolidated	Simulation reports Division progress reports	• Availability of resources • Strong collaboration • Community engagement • Private sector support	MNRE - DMO
	Hazard and risk assessment for Mt. Vaea undertaken (3.2.2.6)	Hazard and risk assessment for Mt. Vaea undertaken	By end of 2016/17	Nil	Hazard and Risk assessment Report	• Availability of resources • Technical support • Community engagement	MNRE - DMO
	Signages in high risk areas installed (3.2.2.7)	Number of signages installed by end of NESP period	Number of signages installed pa	Nil	Location of signages Division progress reports	• Availability of resources • Community engagement	MNRE - DMO
	Volcanic eruption study conducted for eastern coast of Savaii (3.2.2.9)	Volcanic eruption study undertaken for eastern coast of Savaii	By end of 2020/21	Nil	Volcanic eruption study report	• Availability of resources • Community engagement • Technical support	MNRE - DMO
	Riskcape for Greater Apia area implemented (3.2.2.10)	Extent of implementation	By end of NESP period	Nil	Division progress reports Riskcape analytical reports	• Availability of resources • Community engagement • Technical support	MNRE - DMO
	Coastal and riverbank protection measures implemented (3.2.2.13)	Km of protection measures constructed	By end of 2018/19	Existing to be consolidated	Division progress reports Works contracts	• Availability of resources • Strong collaboration • Community engagement	MNRE - DMO

Continuation of Table 61: ESPO 3.2 : Performance Management Framework 2017-2021 (Part III).

ESPO 3.2	Outputs	Performance Indicator	Target	Baseline (2015)	Means of Verification	Assumptions	Lead IAs
Activity 3.2.3 Strengthen Disaster Management	PDNA Trainings conducted for sectors (3.2.3.1-2)	Number sectors trained	All 14 sectors trained by end of NESP period	Existing to be consolidated	Sector training reports	• Availability of resources • Availability of stakeholders	MNRE - DMO
	Gender sensitive and identified vulnerable groups preparedness and response arrangements and plans in place (3.2.3.3)	Number of preparedness and response arrangements and plans fully mainstreaming gender and specific needs of identified vulnerable groups	By end of NESP period	Existing to be consolidated	Division progress reports	• Availability of resources • Strong collaboration • Community engagement	MNRE - DMO MWCSO
	Public private partnerships established to improve disaster preparedness, response and recover (3.2.3.4-5)	Number of MOUs signed with private sector	By end of NESP period	Existing to be consolidated	Signed MOUs Division progress reports	• Strong collaboration • Private sector support	MNRE - DMO COC
Activity 3.2.4 Improve Knowledge, Information and Education in DRM	DRM Teachers Toolkit reviewed (3.2.4.1/10)	DRM Teachers Toolkit reviewed	By end of 2019/20	Nil	Review report	• Strong collaboration • Availability of resources	MNRE - DMO MESC
	DRM Information Management System upgraded (3.2.4.2/4/8)	Information is readily available to the public	Information is readily available to the public	Ongoing	Division progress reports	• Availability of data • Availability of resources • Strong collaboration	MNRE - DMO /IT
	Post disaster emergency meetings conducted (3.2.4.3)	Number of meetings conducted	By end of NESP period	Existing to be consolidated	Minutes	• Strong collaboration	MNRE - DMO
	DMO Planning and gap analysis exercises conducted (3.2.4.5-6)	Number of trainings conducted	By end of NESP period	Existing to be consolidated	Training reports	• Availability of resources • Strong collaboration • Community support	MNRE - DMO
		Gap analysis information available for decision making	Conducted annually	Ongoing	Gap analysis report	• Strong collaboration	MNRE - DMO
	Research partnerships facilitated (3.2.4.9)	Number of researches undertaken	By end of NESP period	Existing to be consolidated	Research reports	• Availability of staff • Availability of resources	MNRE - DMO

Table 62: ESPO 3.3 : Costed Action Plan 2017-2021.

Long Term Outcome (LTO) 3 - Climate Change and Disaster Risk Management mainstreamed in all sectors								
End of Sector Plan Outcomes (ESPO)	3.3 Meteorological, Atmospheric and Geo-Scientific Information and Data Improved	YEAR AND COST OF IMPLEMENTATION (SAT)					TOTAL	IMPLEMENTING PARTNERS
ACTIVITIES	SUB-ACTIVITIES	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21		
Activity 3.3.1 Strengthen Policy, Legislative and Institutional Framework for Meteorological and Geo-Scientific Information and Data	3.3.1.1 Draft Meteorology Bill		\$100,000.00				\$100,000.00	MNRE - MET / LEGAL, OAG
	3.3.1.2 Review Ozone Layer Regulations 2006	\$5,000.00	\$25,000.00	\$25,000.00			\$55,000.00	MNRE - MET/LEGAL, OAG
	3.3.1.3 Develop Atmospheric Policy			\$50,000.00			\$50,000.00	MNRE - MET, Sector IAs, DPs
	3.3.1.4 Develop National Deep Sea Policy	\$20,000.00					\$20,000.00	MNRE - MET, Sector IAs, DPs
	Policy, Legislative, Institutional Framework Sub-total	\$25,000.00	\$125,000.00	\$75,000.00	\$0.00	\$0.00	\$225,000.00	
Activity 3.3.2 Improve quality and accuracy of weather services	3.3.2.1 Ongoing maintenance of weather stations	\$45,000.00	\$63,000.00	\$63,000.00	\$63,000.00	\$63,000.00	\$297,000.00	MNRE - MET
	3.3.2.2 Issuance of weather and tide forecasts for the public and aviation services	\$23,000.00	\$26,000.00	\$26,000.00	\$26,000.00	\$26,000.00	\$127,000.00	MNRE - MET, Media
	3.3.2.3 Ongoing operation and maintenance of Forecasting Systems	\$23,000.00	\$26,000.00	\$26,000.00	\$26,000.00	\$26,000.00	\$127,000.00	MNRE - MET
	3.3.2.4 Develop severe weather forecasting services for non tropical cyclone events (SWFDDP) - Radar	\$5,042.00	\$7,000.00	\$7,000.00	\$7,000.00	\$7,000.00	\$33,042.00	MNRE - MET
	3.3.2.5 Deliver timely and accurate weather forecasting	\$5,000.00	\$7,000.00	\$7,000.00	\$7,000.00	\$7,000.00	\$33,000.00	MNRE - MET
	Weather Services Sub-total	\$101,042.00	\$129,000.00	\$129,000.00	\$129,000.00	\$129,000.00	\$617,042.00	
Activity 3.3.3 Improve quality and accuracy of climate information and data	3.3.3.1 Ongoing management of rainfall and climate observation Network	\$8,000.00	\$10,000.00	\$10,000.00	\$8,000.00	\$8,000.00	\$44,000.00	MNRE - MET / WRD
	3.3.3.2 Ongoing maintenance and calibration of meteorological equipment to improve quality	\$45,000.00	\$63,000.00	\$63,000.00	\$63,000.00	\$63,000.00	\$297,000.00	MNRE - MET
	3.3.3.3 Upgrade Climate Database Management System, Data Rescue and Data Migration	\$7,000.00	\$7,000.00	\$7,000.00	\$7,000.00	\$7,000.00	\$35,000.00	MNRE - MET
	3.3.3.4 Effective monitoring of climate variability and long term change	\$8,000.00	\$7,000.00	\$7,000.00	\$7,000.00	\$7,000.00	\$36,000.00	MNRE - MET
	3.3.3.5 Develop new Climate Early Warning Products and services for all sectors of	\$10,000.00	\$14,000.00	\$14,000.00	\$14,000.00	\$14,000.00	\$66,000.00	MNRE - MET / DMO/WRD
	3.3.3.6 Effective Seasonal Climate, Rainfall and Temperature Prediction services	\$7,000.00	\$7,000.00	\$7,000.00	\$7,000.00	\$7,000.00	\$35,000.00	MNRE - MET / WRD
	3.3.3.7 Collect and document Traditional Knowledge (TK) on Climate Predictions and	\$20,000.00	\$24,000.00	\$24,000.00	\$24,000.00	\$24,000.00	\$116,000.00	MNRE - MET
	3.3.3.8 Timely Climate-Smart public awareness on climate variability and long term	\$10,000.00	\$14,000.00	\$14,000.00	\$14,000.00	\$14,000.00	\$66,000.00	MNRE - MET
	Climate Services Sub-total	\$115,000.00	\$146,000.00	\$146,000.00	\$144,000.00	\$144,000.00	\$695,000.00	
Activity 3.3.4 Reduce and control use of Ozone Depleting Substances	3.3.4.1 Establish a fully functional Air Quality Monitoring Unit to monitor air pollution, Ozone and level of GHG emissions			\$166,432.00	\$166,432.00	\$166,432.00	\$499,296.00	MNRE - MET/CORP.SERVICES, PSC, MOF
	3.3.4.2 Monitor Air Quality			\$100,000.00	\$150,000.00	\$250,000.00	\$500,000.00	MNRE - MET
	3.3.4.3 Ongoing implementation of the Licensing system	\$7,200.00	\$7,200.00	\$7,200.00	\$7,200.00	\$7,200.00	\$36,000.00	MNRE - MET
	3.3.4.4 Monitor consumption of Ozone Depleting Substances (ODS)	\$7,200.00	\$7,200.00	\$7,200.00	\$7,200.00	\$7,200.00	\$36,000.00	MNRE - MET
	3.3.4.5 Monitor compliance to code of good refrigeration practices/procedures and standards	\$7,200.00	\$7,200.00	\$7,200.00	\$7,200.00	\$7,200.00	\$36,000.00	MNRE - MET
	3.3.4.6 Implement recycling and recovery activities	\$7,200.00	\$7,200.00	\$7,200.00	\$7,200.00	\$7,200.00	\$36,000.00	MNRE - MET, Private Sector
	3.3.4.7 Implement certification system for refrigeration personnel	\$7,200.00	\$7,200.00	\$7,200.00	\$7,200.00	\$7,200.00	\$36,000.00	MNRE - MET
	3.3.4.8 Prepare reporting to the Montreal Protocol	\$7,200.00	\$7,200.00	\$7,200.00	\$7,200.00	\$7,200.00	\$36,000.00	MNRE - MET
	3.3.4.9 Improve public awareness on Ozone Depleting Substances (ODS)	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$50,000.00	MNRE - MET
	Ozone Protection Sub-total	\$53,200.00	\$53,200.00	\$319,632.00	\$369,632.00	\$469,632.00	\$1,265,296.00	
Activity 3.3.5 Conduct Geo-Scientific Observations and Investigations	3.3.5.1 Conduct geo-hazard and geotechnical investigation works for feasibility	\$45,000.00	\$63,000.00	\$63,000.00	\$63,000.00	\$63,000.00	\$297,000.00	MNRE - MET
	3.3.5.2 Develop database for geo-technical data	\$7,000.00	\$7,000.00	\$7,000.00	\$7,000.00	\$7,000.00	\$35,000.00	MNRE - MET
	3.3.5.3 Develop Compliance and Safety operation standards manual	\$7,000.00	\$7,000.00	\$107,000.00	\$7,000.00	\$7,000.00	\$135,000.00	MNRE - MET
	3.3.5.4 Strengthen and upgrade geological laboratory	\$10,000.00	\$14,000.00	\$64,000.00	\$64,000.00	\$64,000.00	\$216,000.00	MNRE - MET, Academic
	3.3.5.5 Provide effective and efficient Earthquake and Tsunami Warning Services	\$14,000.00	\$14,000.00	\$14,000.00	\$14,000.00	\$14,000.00	\$70,000.00	MNRE - MET/DMO
	3.3.5.6 Strengthen Monitoring Communication Systems	\$7,000.00	\$7,000.00	\$57,000.00	\$57,000.00	\$57,000.00	\$185,000.00	MNRE - MET / DMO
	3.3.5.7 Strengthen Maintenance and Calibration of geophysical stations	\$10,000.00	\$10,000.00	\$60,000.00	\$60,000.00	\$60,000.00	\$200,000.00	MNRE - MET
	3.3.5.8 Improve Geomagnetism observations	\$7,000.00	\$7,000.00	\$107,000.00	\$107,000.00	\$107,000.00	\$335,000.00	MNRE - MET
	3.3.5.9 Identify Geohazard gaps	\$7,000.00	\$7,000.00	\$37,000.00	\$57,000.00	\$57,000.00	\$165,000.00	MNRE - MET/DMO
	3.3.5.10 Review and produce geophysical awareness materials	\$7,000.00	\$7,000.00	\$27,000.00	\$27,000.00	\$37,000.00	\$105,000.00	MNRE - MET
	3.3.5.11 Develop a Geoscience Hazard Response Plan			\$150,000.00			\$150,000.00	MNRE - MET / DMO
	Geo-Scientific Services Sub-total	\$121,000.00	\$143,000.00	\$693,000.00	\$463,000.00	\$473,000.00	\$1,893,000.00	
	GRAND TOTAL	\$415,242.00	\$596,200.00	\$1,362,632.00	\$1,105,632.00	\$1,215,632.00	\$4,695,338.00	

Table 63: ESPO 3.3 : MTEF 2017-2021.

ESPO 3.3 MTEF						
NESP Period	Recurrent	Investment	Secured		Shortfall	
			Recurrent	Investment	Recurrent	Investment
2016/17	\$1,512,198.00	\$94,200.00	\$1,512,198.00	\$84,200.00	\$0.00	\$10,000.00
2017/18	\$1,582,156.00	\$205,200.00	\$1,512,198.00	\$191,200.00	\$69,958.00	\$14,000.00
2018/19	\$1,570,982.00	\$805,200.00	\$1,334,592.00	\$91,200.00	\$236,390.00	\$714,000.00
2019/20	\$1,570,982.00	\$548,200.00	\$1,334,592.00	\$64,200.00	\$236,390.00	\$484,000.00
2020/21	\$1,570,982.00	\$658,200.00	\$1,334,592.00	\$64,200.00	\$236,390.00	\$594,000.00
SUB-TOTAL	\$7,807,300.00	\$2,311,000.00	\$7,028,172.00	\$495,000.00	\$779,128.00	\$1,816,000.00
TOTAL	\$10,118,300.00		\$7,523,172.00		\$2,595,128.00	

Table 64: ESPO 3.3 : Performance Management Framework 2017-2021 (Part I)

ESPO 3.3	Outputs	Performance Indicator	Target	Baseline (2015)	Means of Verification	Assumptions	Responsible IA
Activity 3.3.1 Strengthen Policy, Legislative and Institutional Framework for Meteorological and Geo-Scientific Information and Data	Meteorology Legislation in place (3.3.1.1)	Legislation in force	By end of 2018/19	Nil	Legislation	• Availability of resources • Political support • Community engagement	MNRE - MET /LEGAL OAG
	Ozone Regulations reviewed (3.3.1.2)	Ozone Regulations reviewed	By end of 2018/19	Ozone Regulations 2006	Amendment to Regulations Review report	• Availability of resources • Political support • Private sector support • Community engagement	MNRE - MET
	National Atmospheric Policy developed (3.3.1.3)	National Atmospheric Policy developed	By end of 2018/19	Nil	Policy document Cabinet directive	• Availability of resources • Political support • Private sector support • Community engagement	MNRE - MET
	National Deep Sea Policy developed (3.3.1.4)	National Deep Sea Policy developed	By end of 2016/17	Nil	Policy document Cabinet directive	• Availability of resources • Political support • Community engagement	MNRE - MET
Activity 3.3.2 Improve quality and accuracy of weather services	Weather stations maintained (3.3.2.1)	Number of weather stations maintained	Number of weather stations maintained pa	Ongoing	Division progress reports Maintenance plan	• Availability of resources • Community engagement • Staff capacity	MNRE - MET
	Weather and tide forecasts issued (3.3.2.2/5)	Number of weather and tide forecasts issued	Per annum	Ongoing	Weather and tide forecast bulletins	• Strong collaboration • Availability of resources • Staff capacity • Timeliness and accuracy of information/data	MNRE - MET
	Forecasting system maintained (3.3.2.3)	Status of forecasting system	Forecasting system in good condition	Ongoing	Division progress reports	• Availability of staff • Availability of resources • Capacity of staff	MNRE - MET
	Severe weather forecasting services (Radar) developed (3.3.2.4)	Number of bulletins issued	Bulletins issued pa	Existing to be consolidated	Bulletins issued Division progress reports	• Availability of resources • Capacity of staff	MNRE - MET
Activity 3.3.3 Improve quality and accuracy of climate information and data	Rainfall and Climate observation network managed effectively (3.3.3.1 - 4/6-7)	Maintenance and calibration of equipment undertaken regularly	Maintenance and calibration activities undertaken pa	Ongoing	Division progress report Maintenance and calibration plan	• Availability of resources • Capacity of staff • Community engagement	MNRE - MET
		Climate database management system updated	Number of updates undertaken pa	Ongoing	Division progress reports Database reports	• Capacity of staff • Availability of data • Quality data	MNRE - MET

Continuation of Table 64: ESPO 3.3 : Performance Management Framework 2017-2021 (Part II)

ESPO 3.3	Outputs	Performance Indicator	Target	Baseline (2015)	Means of Verification	Assumptions	Lead IAs
Activity 3.3.3 Improve quality and accuracy of climate information and data (cont)	Rainfall and Climate observation network managed effectively (3.3.3.1 - 4/6-7) (cont)	Seasonal climate, rainfall and temperature predictions developed	Number of predictions developed pa	Existing to be consolidated	Predictions Division progress reports	- Capacity of staff - Availability of data - Quality data - Availability of resources	MNRE - MET
		Traditional knowledge information integrated into predictions	Traditional knowledge information collected and integrated	Existing to be consolidated	Division progress reports	- Capacity of staff - Availability of data - Community engagement - Availability of resources	MNRE - MET
	New climate early warning products / services available (3.3.3.5)	Number of new climate early warning products/services available	By end of NESP period	Existing to be consolidated	Division progress reports	- Availability of resources - Capacity of staff	MNRE - MET
	Public awareness programs on climate variability and long term climate change conducted (3.3.3.8)	Number of awareness programs conducted	Number of programs conducted pa	Existing to be consolidated	Division progress reports	- Availability of resources - Strong collaboration - Community engagement	MNRE - MET
Activity 3.3.4 Reduce and control use of ODS	Air Quality Monitoring Unit established (3.3.4.1.)	Air Quality Monitoring Unit established	By end of 2018/19	Nil	MNRE Organisational Structure PSC Approval MOF Budget	- Political support - PSC approval - Availability of resources - Strong collaboration	MNRE - MET /CSU PSC MOF
	Air Quality monitored (3.3.4.2)	Availability of air quality monitoring data on identified parameters	By end of 2018/19	Existing to be consolidated	Air Quality monitoring reports /database	- Availability of resources - Availability of monitoring equipment - Technical support	MNRE - MET
	Effective licensing system in place (3.3.4.3)	Number of licenses issued	Per annum	Existing to be consolidated	Division progress reports	- Strong collaboration - Private sector support	MNRE - MET Private sector
	Consumption of Ozone Depleting substances monitored (3.3.4.4)	Rate of ODS consumption	Consumption data pa	Existing to be consolidated	Division progress reports	- Strong collaboration - Monitoring capacity - Availability of data	MNRE - MET
	Code of good refrigeration practices/standards/ Procedures enforced (3.3.4.5)	% compliance with code of good refrigeration practice/standards/pro	% compliance pa	Existing to be consolidated	Division progress reports	- Strong collaboration - Monitoring & enforcement capacity - Availability of data	MNRE - MET Private sector

Continuation of Table 64: ESPO 3.3 : Performance Management Framework 2017-2021 (Part III)

ESPO 3.3	Outputs	Performance Indicator	Target	Baseline (2015)	Means of Verification	Assumptions	Lead IAs
Activity 3.3.5 Conduct Geo-Scientific Observations and Investigations	Geotechnical information available (3.3.5.1-2)	Number of investigations conducted	Number of investigations conducted pa	Existing to be consolidated	Geo-technical reports	• Technical capacity • Availability of resources	MNRE - MET
		Geotechnical database developed	Database updated annually	Nil	Database reports	• Technical capacity • Availability of data	MNRE - MET
	Compliance and Safety Operation Standards Manual developed (3.3.5.3)	Manual developed	By end of 2018/19	Nil	Manual	• Availability of resources • Technical capacity	MNRE - MET
	Geological laboratory upgraded (3.3.5.4)	Geological laboratory upgraded progressively	By end of NESP period	Existing to be consolidated	Geological laboratory Division progress reports	• Availability of resources • Technical capacity	MNRE - MET
	Earthquake and Tsunami warnings issued (3.3.5.5-6)	Number of warning issued	Number of warnings issued pa	Existing to be consolidated	Warning notices Division progress reports	• Availability of resources • Availability of data	MNRE - MET
	Geophysical stations maintained and calibrated regularly (3.3.5.7)	Number of stations maintained and calibrated	Number of stations maintained and calibrated pa	Existing to be consolidated	Maintenance Plan Division progress reports	• Availability of resources • Technical capacity	MNRE - MET
	Geomagnetism observations undertaken (3.3.5.8)	Number of observations undertaken	Number of observations undertaken pa	Existing to be consolidated	Geomagnetic Annual Observations Report	• Technical capacity	MNRE - MET
	Geo-hazard gaps identified and addressed (3.3.5.9-10)	Geo-hazard gaps identified and addressed	By end of NESP period	Existing to be consolidated	Geo-hazard reports	• Technical capacity • Availability of resources	MNRE - MET
		Geo-physical awareness materials produced	Awareness materials produced pa	Ongoing	Awareness materials Division progress reports	• Availability of resources • Strong collaboration • Community engagement	MNRE - MET
	Geo-science hazard response plan developed (3.3.5.11)	Response plan developed	By end of NESP period	Nil	Geo-hazard response plan	• Availability of resources • Technical capacity • Strong collaboration • Community engagement	MNRE - MET

Continuation of Table 64: ESPO 3.3 : Performance Management Framework 2017-2021 (Part IV)

ESPO 3.3	Outputs	Performance Indicator	Target	Baseline (2015)	Means of Verification	Assumptions	Responsible IA
Activity 3.3.5 Conduct Geo-Scientific Observations and Investigations	Geotechnical information available (3.3.5.1-2)	Number of investigations conducted	Number of investigations conducted pa	Existing to be consolidated	Geo-technical reports	• Technical capacity • Availability of resources	MNRE - MET
		Geotechnical database developed	Database updated annually	Nil	Database reports	• Technical capacity • Availability of data	MNRE - MET
	Compliance and Safety Operation Standards Manual developed (3.3.5.3)	Manual developed	By end of 2018/19	Nil	Manual	• Availability of resources • Technical capacity	MNRE - MET
	Geological laboratory upgraded (3.3.5.4)	Geological laboratory upgraded progressively	By end of NESP period	Existing to be consolidated	Geological laboratory Division progress reports	• Availability of resources • Technical capacity	MNRE - MET
	Earthquake and Tsunami warnings issued (3.3.5.5-6)	Number of warning issued	Number of warnings issued pa	Existing to be consolidated	Warning notices Division progress reports	• Availability of resources • Availability of data	MNRE - MET
	Geophysical stations maintained and calibrated regularly (3.3.5.7)	Number of stations maintained and calibrated	Number of stations maintained and calibrated pa	Existing to be consolidated	Maintenance Plan Division progress reports	• Availability of resources • Technical capacity	MNRE - MET
	Geomagnetism observations undertaken (3.3.5.8)	Number of observations undertaken	Number of observations undertaken pa	Existing to be consolidated	Geomagnetic Annual Observations Report	• Technical capacity	MNRE - MET
	Geo-hazard gaps identified and addressed (3.3.5.9-10)	Geo-hazard gaps identified and addressed	By end of NESP period	Existing to be consolidated	Geo-hazard reports	• Technical capacity • Availability of resources	MNRE - MET
		Geo-physical awareness materials produced	Awareness materials produced pa	Ongoing	Awareness materials Division progress reports	• Availability of resources • Strong collaboration • Community engagement	MNRE - MET
	Geo-science hazard response plan developed (3.3.5.11)	Response plan developed	By end of NESP period	Nil	Geo-hazard response plan	• Availability of resources • Technical capacity • Strong collaboration • Community engagement	MNRE - MET

Table 65: LTO 4 : Outcomes Map 2017-2021.

LONG TERM OUTCOME 4: Effective Enabling Environment			
END OF SECTOR PLAN OUTCOMES (ESPO)			
4.1 Sector governance and cross-sectoral coordination strengthened			
OUTPUTS			
Sector Policy and Legislative frameworks implemented	Sector Coordination Division staff recruited	Quarterly meetings of the NESSC conducted	Number of Reports available and accessed through the DKIF
Number of prosecution cases made	MEA Coordination Meetings between MFAT and MNRE conducted	NESSC six monthly site visits conducted	Fiber connection installed and operational
New policies developed and / or reviewed	Cross-sectoral coordination network established	Sector coordination committees streamlined	Disaster recovery plan for ICT developed and implemented
New legislation/regulations drafted /enacted	Six monthly dialogue with sector development partners established	Sector Annual Review Reviews conducted	Up-to-date software and hardware installed for improved communication
Number non-comliant cases reported and investigated	Six monthly dialogue with sector NGOs/CSOs established	Sector MTEF reviewed annually	
	Sector Capacity Building Plan developed	NESP Independent Evaluation conducted	
	Sector Disaster Management Guidelines implemented	State of the environment assessment conducted	
	Sector Communication Strategy developed	Household Environment Survey conducted	
	Sector Monitoring, Evaluation and Reporting Framework developed	Sector related research promoted and supported	
	NESP Performance Monitoring Reporting system based on UNEP's IRIS platform in place		
ACTIVITIES			
Activity 4.1.1 Robust sector policy and legislative framework in place	Activity 4.1.2 Strengthen sector wide planning, coordination and institutional capacities of IAs	Activity 4.1.3 Strengthen Sector Monitoring, Evaluation and Reporting	Activitiy 4.1.4 Improve effectiveness of Sector Information Management and Communication Systems

Table 66: ESPO 4.1 : Costed Action Plan 2017-2021.

LONG TERM OUTCOME (LTO) 4 Robust Sector Governance								
End of Sector Plan Outcomes (ESPO)	4.1 Effective Enabling Environment	YEAR AND COST OF IMPLEMENTATION					TOTAL	IMPLEMENTING PARTNERS
ACTIVITIES	SUB-ACTIVITIES	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21		
Activity 4.1.1 Robust Sector Policy and Legislative Framework in place	4.1.1.1 Strengthen Implementation and Enforcement of existing Sector Policies and Legislative Frameworks	\$318,032.00	\$318,032.00	\$318,032.00	\$318,032.00	\$318,032.00	1,590,160.00	MNRE - Legal Services, All Divisions, Sector IAs
	<i>Policy, Legislative Framework Sub-total</i>	\$318,032.00	\$318,032.00	\$318,032.00	\$318,032.00	\$318,032.00	1,590,160.00	
Activity 4.1.2 Strengthen sector wide planning, coordination and institutional capacities of IAs	4.1.2.1 Strengthen institutional capacity of the Sector Coordination Division to fulfill its role	\$84,048.00	\$84,048.00	\$238,400.00	\$238,400.00	\$238,400.00	883,296.00	MNRE - ECD/CSU, PSC, MOF
	4.1.2.2 Facilitate regular meetings between MNRE (technical focal point) and MFAT (political focal point) in relation to environmental MEAs (international and regional) and frameworks (including disaster and climate change) to strengthen coordination and exchange of information.		\$0.00	\$0.00	\$0.00	\$0.00	0.00	MNRE-ECD/LEGAL/DEC/GEF-CC/FOR/DMO
	4.1.2.3 Work closely with Sector Coordinators to facilitate mainstreaming of environmental sustainability, climate change and disaster risk management in all sector plans	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	MNRE - DMO/ECD/MOF
	4.1.2.4 Actively participate and contribute to the Quarterly Sector Coordinators meetings coordinated by EPPD, Ministry of Finance		\$0.00	\$0.00	\$0.00	\$0.00	0.00	MNRE-ECD/MOF-Aid, EPPD/Development Partners
	4.1.2.5 Facilitate six monthly forums with Environmental NGOs, CSOs etc to strengthen partnership in the implementation of the NESP		\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	12,000.00	Environment NGOs. CSOs, GEF-SGP, CSSP
	4.1.2.6 Attend sector related meetings and workshops	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	MNRE - All Divisions / Environment Sector IAs
	4.1.2.7 Develop and implement Sector Capacity Building Plan		\$20,000.00	\$100,000.00	\$100,000.00	\$100,000.00	320,000.00	MNRE - All Divisions, Environment Sector IAs
	4.1.2.8 Develop and implement Sector Disaster Management Strategy		\$5,000.00	\$2,000.00	\$2,000.00	\$2,000.00	11,000.00	MNRE - All Divisions, Environment Sector IAs
	4.1.2.9 Develop and Implement Sector Communication Strategy		\$0.00	\$50,000.00	\$50,000.00	\$50,000.00	150,000.00	MNRE - ECD/ICT/CSU, All Divisions, Environment Sector IAs
	<i>Sector wide planning, coordination and institutional framework Sub-total</i>	\$92,048.00	\$121,048.00	\$410,400.00	\$420,400.00	\$420,400.00	1,464,296.00	
Activity 4.1.3 Strengthen Sector Monitoring, Evaluation and Reporting	4.1.3.1 Develop Sector Monitoring, Evaluation and Reporting Framework	\$30,000.00	\$0.00				30,000.00	MNRE - ECD
	4.1.3.2 Develop and operationalise a Performance Monitoring and Reporting System for the NESP based on adaptation of the UNEP National Reporting System or Indicator (IRIS) Reporting Information System	\$0.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	4,000.00	MNRE - ECD/ICT/SBS/UNEP/SPREP
	4.1.3.3 Convene NESSC quarterly meetings to track and monitor progress of NESP implementation	\$0.00	\$0.00	\$8,000.00	\$8,000.00	\$8,000.00	24,000.00	MNRE - ECD
	4.1.3.4 Provide secretariat functions to the NESSC	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	25,000.00	MNRE - ECD
	4.1.3.5 Prepare NESP Quarterly Progress Reports for quarterly meetings of the NESSC and information of the CDC	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	5,000.00	MNRE - ECD / All Divisions/Environment Sector IAs
	4.1.3.6 Undertake 6 monthly NESSC site visits as part of the Sector M & E Framework	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	10,000.00	MNRE - ECD
	4.1.3.7 Facilitate membership and attendance in identified committees and working groups that make up the streamlined sector-wide coordination framework with reports submitted to NESSC quarterly meetings		\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	4,000.00	MNRE - ECD
	4.1.3.8 Undertake NESP annual reviews with inputs from IA Management Plan reviews and MOF Budget reviews. Compile and publish Sector Annual Review Reports	\$10,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	30,000.00	MNRE - All Divisions, Environment Sector IAs
	4.1.3.9 Align Sector Planning with IA Corporate Plans, Management Plans, Budget and Annual Review Reporting	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	10,000.00	Environment Sector IAs
	4.1.3.10 Secure funding from development partners to facilitate annual sector reviews and planning workshops, retreats etc		\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	100,000.00	Development Partners
	4.1.3.11 Undertake annual reviews of the Sector MTEF in line with the national budget cycle	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	MNRE - All Divisions, Environment Sector IAs
	4.1.3.12 Undertake sector-wide planning workshops including focus group consultations to facilitate review and update of the NESP				\$10,000.00	\$10,000.00	20,000.00	MNRE - All Divisions, Sector IAs
	4.1.3.13 Develop consolidated review reports for the NESP every four years to facilitate update of the NESP	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	25,000.00	MNRE - All Divisions, Sector IAs
	4.1.3.14 Undertake independent review and evaluation of the NESP at the end of its term			\$30,000.00		\$50,000.00	80,000.00	MNRE - All Divisions, Environment Sector IAs
	4.1.3.15 Coordinate preparation and update of Samoa's State of Environment Report		\$10,000.00	\$200,000.00			210,000.00	MNRE - ECD/All Divisions, Sector IAs, Private Sector and Local Communities
	4.1.3.16 Coordinate implementation of a Household environment survey		\$0.00	\$250,000.00	\$100,000.00		350,000.00	MNRE - ECD/All Divisions, SBS, MOF
	4.1.5.17 Promote and support sector related research	\$70,000.00	\$70,000.00	\$170,000.00	\$170,000.00	\$170,000.00	650,000.00	MNRE - WSCU/ECD, Water Sector and Environment Sector IAs
	<i>Sector wide planning, coordination and institutional framework Sub-total</i>	\$117,000.00	\$118,000.00	\$688,000.00	\$308,000.00	\$258,000.00	\$1,489,000.00	
Activity 4.1.4 Improve effectiveness of Sector Information Management and Communication systems	4.1.4.1 Ensure DKIF is 100% operational	\$326,344.99	\$72,481.59		\$2,000.00	\$2,000.00	404,826.58	MNRE - ICT & All Divisions
	4.1.4.2 Management of MNRE Network (LAN & WAN) infrastructure and services improved			\$20,000.00	\$20,000.00	\$20,000.00	60,000.00	MNRE - ICT & All Divisions
	4.1.4.3 Install fiber connection between 2 stations (DMO, Met)			\$10,000.00	\$10,000.00	\$10,000.00	30,000.00	MNRE ICT/DMO/MET/CSU
	4.1.4.4 Data protection, security, management and dissemination improved;			\$20,000.00	\$20,000.00	\$20,000.00	60,000.00	MNRE ICT/CSU
	4.1.4.5 Strengthen ICT Division institutional capacity			\$350,276.00	\$350,276.00	\$395,870.00	1,096,422.00	MNRE ICT/CSU
	4.1.4.6 Undertake regular updates and maintenance of backup server			\$15,000.00	\$15,000.00	\$15,000.00	45,000.00	MNRE ICT/CSU
	4.1.4.7 Develop and implement a disaster recovery plan for ICT			\$5,000.00	\$5,000.00	\$5,000.00	15,000.00	MNRE ICT/CSU
	4.1.4.8 Secure cost effective and up-to-date software and hardware/equipment			\$15,000.00	\$15,000.00	\$15,000.00	45,000.00	MNRE ICT/CSU
	4.1.4.9 Procurement of licence and maintenance			\$80,000.00	\$80,000.00	\$80,000.00	240,000.00	MNRE ICT/CSU
	<i>Information management and communication</i>	\$326,344.99	\$72,481.59	\$517,276.00	\$517,276.00	\$562,870.00	\$1,996,248.58	
GRAND TOTAL		\$853,424.99	\$629,561.59	\$1,933,708.00	\$1,563,708.00	\$1,559,302.00	\$6,539,704.58	

Table 67: ESPO 4.1 : MTEF 2017-2021.

ESPO 4.1 MTEF						
NESP Period	Recurrent	Investment	Secured		Shortfall	
			Recurrent	Investment	Recurrent	Investment
2016/17	\$2,843,441.30	\$1,282,735.09	\$2,837,441.30	\$1,232,735.09	\$6,000.00	\$50,000.00
2017/18	\$2,919,818.70	\$1,646,268.29	\$2,903,818.70	\$1,536,268.29	\$16,000.00	\$110,000.00
2018/19	\$3,553,470.40	\$1,787,000.00	\$2,850,842.40	\$980,000.00	\$702,628.00	\$807,000.00
2019/20	\$3,558,470.40	\$1,462,000.00	\$2,855,842.40	\$1,025,000.00	\$702,628.00	\$437,000.00
2020/21	\$3,604,064.40	\$1,412,000.00	\$2,855,842.40	\$1,025,000.00	\$748,222.00	\$387,000.00
SUB-TOTAL	\$16,479,265.20	\$7,590,003.38	\$14,303,787.20	\$5,799,003.38	\$2,175,478.00	\$1,791,000.00
TOTAL	\$24,069,268.58		\$20,102,790.58		\$3,966,478.00	

Table 68: ESPO 4.1 : Performance Management Framework 2017-2021 (Part I).

ESPO 4.1	Outputs	Performance Indicator	Target	Baseline (2015)	Means of Verification	Assumptions	Responsible IA
Activity 4.1.1 Robust and coherent Sector Policy and Legislative Framework	Sector policy and legislative framework enforced (4.1.1.1a)	Number of prosecution cases	Prosecutions cases pa	Existing to be consolidated	Prosecution reports	- Enforcement capacity - Strong collaboration - Community engagement	MNRE - LEGAL/MNRE Police/OAG/MJCA
		Number of civil enforcements made	Civil enforcements pa	New	Division reports Court orders	- Enforcement capacity - Strong collaboration	MNRE - Legal OAG/MJCA
		Number of existing policies reviewed and updated	By end of NESP period	Existing to be consolidated	Review Reports Updated Policies	Availability of resources	All MNRE Divisions
		Number of new policies developed	Number of new policies developed by end of NESP period	Existing to be consolidated	New policy documents	- Availability of resources - Political support - Community engagement - Institutional capacity	All MNRE Divisions MPMC MOF
	Sector Policy and Legislative frameworks implemented (4.1.1.1b)	Extent of implementation of all sector policies and legislative tools	Extent of implementation by end of NESP period	Existing to be consolidated	Sector Policy and Legislative review report	- Availability of resources - Political support - Community engagement - Institutional capacity	All MNRE Divisions MPMC OAG MOF PSC
Activity 4.1.2 Strengthen sector wide planning, coordination and institutional roles and capacities of IAs	Sector Coordination) Division staff recruited (4.1.2.1)	Recruitment of staff	By end of 2018/19	1 ACEO	PSC approval MOF budget	- PSC approval - Availability of resources	MNRE - ECD/CSU PSC MOF
	MEA Coordination(4.1.2.2) Meetings between MFAT and MNRE conducted	Quarterly coordination meetings	Quarterly coordination meetings pa	New	Minutes	- Strong collaboration - Availability of MFAT & MNRE representatives	MNRE MFAT
	Cross-sectoral coordination network established (4.1.2.3/6)	Sector Coordinators Forums	Quarterly meetings	Existing to be consolidated	Minutes	- Strong collaboration - Availability of Sector Coordination Units	MOF - EPPD 14 Sectors
	Six monthly dialogue with sector development partners established(4.1.2.4)	Open dialogue with Sector Development Partners	2 meetings pa	New	Minutes	- Strong collaboration - Donor support - Availability of members	MNRE - ECD Donors Sector IAs
	Six monthly dialogue with sector NGOs/CSOs established (4.1.2.5)	Open dialogue with Sector NGOs/CSOs	2 meetings pa	New	Minutes	- Strong collaboration - NGO/CSO support - Availability of reps.	MNRE - ECD NGOs CSOs Sector IAs
	Sector Capacity Building Plan developed (4.1.2.7)	Sector Capacity Building Plan developed	By end of 2017/18	New	Sector Capacity Building Plan	- Availability of resources - Strong collaboration	MNRE - ECD /CSU Sector IAs
	Sector Disaster Management Guidelines implemented (4.1.2.8)	Extent of implementation	5% implementation pa	New	Sector Quarterly Progress Reports	- Availability of resources - Strong collaboration	MNRE - DMO/ECD Sector IAs
	Sector Communication	Sector Communication	By end of 2018/19	New	Sector Communication	Availability of resources	MNRE - ECD

Table 68: ESPO 4.1 : Performance Management Framework 2017-2021 (Part II).

ESPO 4.1	Outputs	Performance Indicator	Target	Baseline (2015)	Means of Verification	Assumptions	Responsible IA
Activity 4.1.3 Strengthen Sector Monitoring, Evaluation and Reporting	Sector Monitoring, Evaluation and Reporting Framework developed (4.1.3.1)	Sector Monitoring, Evaluation and Reporting Framework developed	By end 2016/17	New	NESP Sector Plan	• Strong collaboration • Availability of resources • Availability of data • Timeliness of information	MNRE - ECD
	NESP Performance Monitoring Reporting system based on UNEP's IRIS platform in place (4.1.3.2)	System in place	By end of 2017/18	New	Excel spreadsheet	• Strong collaboration • Availability of data • Timeliness of information	MNRE - ECD
		DKIF operational	By end of 2017/18	New	DKIF	• Strong collaboration • Availability of reports	MNRE - ICT
	Quarterly meetings of the NESSC conducted (4.1.3.3-5)	Number of meetings conducted	Number of meetings conducted pa	Existing to be consolidated	Minutes	• Availability of members	MNRE - ECD
		Preparation of quarterly reports	4 Quarterly Reports pa	4 Quarterly Reports	Quarterly Progress Reports	• Timeliness of reports	MNRE - ECD
	NESSC six monthly site visits conducted (4.1.3.6)	NESSC site visits conducted	Every 6 months	Nil	Site visit reports	• Strong collaboration • Availability of members	MNRE - ECD NESSC
	Sector coordination committees streamlined (4.1.3.7)	Number of meetings attended to	Number of meetings per quarter	Existing to be consolidated	Minutes Sector quarterly progress reports	• Timeliness of meetings • Availability of IAs • Strong collaboration	MNRE - ECD Sector IAs
	Sector Annual Review Reviews conducted (4.1.3.8-10/12-13)	M & E workshops / trainings	Secured for duration of NESP	New	MOU with Donors	• Donor support • Strong collaboration	MNRE - ECD Donors
		Sector Annual Review Reports developed	Annual reports developed pa	Ongoing	Annual review reports	• Strong collaboration • Community engagement	MNRE - ECD Sector IAs
	Sector MTEF reviewed annually (4.1.3.11)	Sector MTEF reviewed	Annual reviews	Ongoing	Updated MTEF	• Strong collaboration	MNRE - ECD/CSU MOF
	NESP Independent Evaluation conducted (4.1.3.14)	NESP Independent Evaluation conducted	By the end of the NESP period	New	NESP Evaluation report	• Availability of resources • Availability of stakeholders • Strong collaboration	MNRE - ECD Sector IAs
	State of the environment assessment conducted (4.1.3.15)	Samoa's state of environment assessed	By end of 2020/21	SOE 2013	Samoa's State of Environment Report	• Availability of resources • Technical capacity • Strong collaboration • Availability of data	MNRE - ECD Sector IAs

ESPO 4.1	Outputs	Performance Indicator	Target	Baseline (2015)	Means of Verification	Assumptions	Responsible IA
Activity 4.1.4 Improve effectiveness of Sector Information Management and Communication systems	DKIF 100% operational (4.1.4.1)	Number of users	Per month	New	System report	• Technical capacity • Strong collaboration	MNRE - ICT / CSU
	Fiber connection installed (4.1.4.3)	Fiber connection installed	Installed by end of 2018/19	New	Connection hardware	• Availability of resources	MNRE - ICT/CSU
	Disaster recovery plan for ICT developed (4.1.4.7)	Disaster recovery plan developed	By end of NESP period	New	Disaster recovery plan	• Availability of resources • Technical capacity	MNRE - ICT /DMO
	Up-to-date software and hardware installed for improved communication (4.1.4.8)	Updated software and hardware installed	By end of NESP period	New	Software and hardware	• Availability of resources	MNRE - ICT



“The manumea bird, Didunculus strigirostris, is Samoa’s national bird. It is an endemic species and listed as critically endangered”



Ministry of Natural Resources and Environment