

REVIEW OF ANNEX 3a): VCP MONITORING & EVALUATION FRAMEWORK & PLAN (MEF & MEP)

Monitoring	Indicators	End-of-project target	Means of verifications Method/Data sources	Frequency	Data collection partners
GCF Core Indicators - Key Impact Potential – Indicators / Targets					
GCF Core Indicators – Key impact potential	Indicator 1: Expected total number of direct and indirect beneficiaries, disaggregated by gender (reduced vulnerability or increased resilience)	Direct: 26,000 beneficiaries in AUA Indirect: 37,000 people in the Greater Apia Catchment Area	GIS mapping of AUA and Greater Apia Catchment Area impacted by the VCP activities and demographic analysis per villages covered (Census 2016).	Annual	PMU MNRE CSSP/MOF SBS
	Indicator 2: Number of beneficiaries relative to total population disaggregated by gender	14% of total population (direct); 20% of total population (direct +indirect)	Assessment of percentages to total population from Census 2016 data.		
Fund-level Impact Indicators / Targets					
Fund level Impact: Increased resilience of infrastructure and the built environment to climate change	Indicator 1: Number physical assets made more resilient to climate variability and change, considering human benefits	19 physical assets (including river walls, extensions, bridge, and drainage)	Site visits – Contractors final report and as-build design. Sighting of Certificates of completion of construction contract (DLP)	Quarterly	PMU LTA MWTI MOF
	Indicator 2: Value of physical assets made more resilient to climate variability and change, considering human benefits	Total value of USD30 million in climate-proofing assets	Financial reports on construction contracts reported by PMU/MOF		
Outcome – Project level Indicators /Targets					
Project Outcome: Strengthened adaptive capacity and reduced exposure to climate risks	Indicator 1 Existence and use Fund supported tools, instruments, strategies and activities by vulnerable households, communities, businesses and public sector services of to respond to climate change and variability.	At least 26,528 residents located in the AUA are protected by flood management interventions.	Project beneficiaries list available with sub-activities responsible parties;	Quarterly	PMU MNRE DMO MOH MWCSDB SBS
			Gender-sensitive sample questionnaire surveys undertaken within the AUA and VRCA villages and analysis of results	Final phase of project	

	Indicator 2 Number of males and females (and percentage of total population) reached by climate-related early warning systems established/strengthened	At least 26,528 residents located in the AUA are receiving EWS for flooding.	Project beneficiaries list available with sub-activities responsible parties;	Quarterly	
			Gender-sensitive sample questionnaire surveys undertaken within the AUA and VRCA villages and analysis of results	Final phase of project	

Monitoring	Indicators	End-of-project target	Means of verifications Method/Data sources	Frequency	Data collection partners
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Output 1 - Core Indicators / Targets

Project Output 1: Assessments and mechanisms in place for an integrated approach to reduce vulnerability towards flood related risks	Indicator 1 Number of sectoral plans and studies developed and/or adopted aligned to the IWMP.	4 Sectoral plans, studies developed for key sectors in the Greater Apia Catchment aligned with the IWMP	Desk Review of Sectoral plans and official approval of reports/plans and key documents.	Annual	PMU MNRE LTA MWTI
	Indicator 2 Number of technical and extension officers with technical and functional capacities for flood-related EWS data collection and interpretation.	At least 300 technicians will be trained on the EWS related flooding	Review of training schedules and documents, list of training participants from IAs, training evaluation surveys and final report on training by contractors NIWA, BMT and DMO/MNRE.		

Output 1 – Gender Action Plan – Monitoring & Evaluation - Indicators /Targets

Monitoring	Indicators	End-of-project target	Means of verifications Method/Data sources	Frequency	Data collection partners
Activity 1.1: Strengthen capacities and information requirements to pursue an integrated programme approach to flood management. - Ensure equitable participation in community	• Number of men and women participating in consultations and workshops in the preparation of the feasibility studies	• At least 500 people in the targeted communities participate in consultations in preparation for feasibility studies (Sex and age disaggregated data)	Review and data compilation from list of participants to consultations and workshops for feasibility studies.	Annual	PMU MWTI LTA MNRE MWSCD

<p>consultations during the preparation of the feasibility studies.</p> <ul style="list-style-type: none"> - Engage pro-actively with MWCSO in the preparation of the workshops - Consider options to strengthen livelihoods in the formulation of the feasibility studies 	<ul style="list-style-type: none"> • Gender and social inclusion concerns identified during the consultations are responded to in the studies 		<p>Review of consultation reports – identify gender-specific concerns raised and addressed by the feasibility studies.</p>		
<p>Activity 1.2: Establish health surveillance systems to track and manage flood related health issues</p> <ul style="list-style-type: none"> - Undertake analysis of the differentiated roles and responsibilities, needs and knowledge by sex and age and PwD in responding disasters - Use this to inform the training material and packages developed Activity 1.2.2 - Use this to inform the training material and packages developed for village councils under Activity 1.2.3 	<ul style="list-style-type: none"> • Evidence of gender and social inclusion analysis of the VCA/VRC communities being utilized in training material developed for health practitioners and village councils 	<p>Training material developed for village councils include gender analysis to prepare for evacuation of flood victims</p>	<p>Review of training material developed by health surveillance and DMO. Assess documents for inclusion of gender issues in the analysis and training material.</p>	<p>Annual</p>	<p>PMU DMO MOH MWSCD</p>
<p>Activity 1.3: Expand EWS coverage to provide flooding alerts in Apia</p> <ul style="list-style-type: none"> - Use the analysis conducted under Activity 1.2 to inform planning and implementation of Activity 1.3.3 on awareness raising with at risk populations 	<ul style="list-style-type: none"> • Evidence of gender and social inclusion analysis being utilized to tailor the EWS to at risk populations 	<p>The EWS takes into consideration gender and social inclusion plans</p>	<p>Review of EWS reports and locate gender and inclusion sections.</p>	<p>Annual</p>	<p>MNRE DMO MWSCD PMU</p>

<p>Activity 1.4: Conduct awareness raising campaigns on building practices and designs for at risk communities living along the Vaisigano river</p> <ul style="list-style-type: none"> - Ensure that manuals developed under Activity 1.4.1 include Chapter D of the Building Code on accessibility for people living with disability - Include requirements on representation of gender equality, disability, elderly and youth access in the MoUs with SUNGO 	<ul style="list-style-type: none"> • Number of manuals with the needs of people living with disability are clearly and accurately reflected 	At least one manual developed taking into consideration building code sections for PWD.	Review of simplified flood-proofing building manuals for evidence or sections on needs of people living with disability and other gender concerns.	Upon completion of activity	MWTI PMU MNRE
	<ul style="list-style-type: none"> • Evidence of gender, disability, age and youth concerns included in MoUs 	TOR for awareness and training include gender and inclusion groups specifics.	Review of TOR for SUNGO MOU and training material/presentations.		

Monitoring	Indicators	End-of-project target	Means of verifications Method/Data sources	Frequency	Data collection partners
Output 2 - Core Indicators / Targets					
<p>Project Output 2: Infrastructure in the Vaisigano River are flood proofed to increase resilience to negative effects of excessive water</p>	<p>Indicator 1 Number of people benefitting and how from improved flood management through implementation of hard and soft measures for the protection of community assets (set by gender).</p>	At least 26,528 people benefit from improved flood management in the VRC for protection of community assets.	Participants lists to project activities, consultations trainings collated and analysed. In final phase, complemented with end-of project sample survey questionnaire of AUA residents on use of project services, tools, instruments and strategies.	Annual	PMU MNRE DMO MWCS
	<p>Indicator 2 Number of people reached (and how) by flood -related early warning systems established (disaggregated by gender).</p>	At least 37,000 residents located in the Apia Urban Area receive EWS for flooding.	DMO map of flooding EWS sirens range against AUA village boundaries. Data on SMS messages from NEOC. Training Reports and Record sheets of trainees from flood related EWS Training Workshops – reviewed by M&E officer		

Output 2– Gender Action Plan – Monitoring & Evaluation - Indicators /Targets

Monitoring	Indicators	End-of-project target	Means of verifications Method/Data sources	Frequency	Data collection partners
<p>Activity 2.1: Channelization of segment 2 and 3 of the Vaisigano river streambed to accommodate increased water flow and decrease flood risks</p> <ul style="list-style-type: none"> - Ensure equitable participation of men and women, youth, elderly and people living with disability in community consultations under 2.1.1, -Include requirement for the training material for maintenance workers under Activity 2.1.3, to include gender and social inclusion considerations - Set targets for young people and women to be achieved under the contracting scheme in Activity 2.1.4 	<ul style="list-style-type: none"> • Number of men and women participating in consultations • Evidence for gender and social inclusion requirements and ToRs for the development and delivery of training material for maintenance workers • Numbers of women and young people employed through the contracting scheme 	<p>At least 3,000 men and women participate in consultations prior to channelization works</p> <p>Gender and social inclusion requirements are taken into consideration for any training and awareness material</p>	<p>Review and data compilation from list of participants to consultations and workshops for channelization of segments 2 and 3.</p> <p>Review TOR for 2.1.4 employment scheme training and awareness.</p> <p>of consultation reports – identify gender-specific concerns raised and addressed by the feasibility studies.</p>	Annual	<p>PMU MWTI LTA MNRE MWSCD</p>
<p>Activity 2.2: Implement ecosystem responses upstream for decreased flows during extreme weather events</p> <ul style="list-style-type: none"> - Ensure equitable participation in consultations to determine options for flood management activities under Activity 2.2.1 - Ensure equitable participation in the development of the community-based adaptation strategy for ecosystem based alternative income generating activities under 	<ul style="list-style-type: none"> • Number of men and women, youth, elderly and people living with disability participating in consultations • Number of women, young people, people living with disability and elderly people participating in income generating activities • Number of women, young people, PWD and elderly people benefiting from the CfWP. 	<p>At least 400 men, women and other vulnerable groups participating in consultations</p> <p>At least 1,000 women, young people, people living with disability and elderly people participating in income generating activities and schemes under activity 2.2</p>	<p>Review and data compilation from list of participants to consultations and workshops under activities 2.2.1, 2.2.4 and 2.2.5.</p> <p>Disaggregate data by gender and vulnerable groups and reported by type of activities (EbAEDP/CfW/PES)</p>	Annual	<p>PMU DMO MOH MWSCD</p>

<p>Activity 2.2.4 -Set targets for women, young people, PWD, and older people in the income generating activities and business incubation activities identified under Activity 2.2.5</p> <p>-Set targets for women, young people, PwD, and older people in the provision of CfWP activities under Activity 2.2.6</p>					
<p>Activity 2.3: Construction upgrade of Lelata Bridge to accommodate increase flood waters</p> <p>- Ensure equitable participation of men and women, youth, elderly and PwD in any community consultations</p>	<ul style="list-style-type: none"> • Number of men, women, young people, PWD and elderly people participating in consultations on the Lelata bridge upgrade, 	<p>At least 200 men and women, youth, elderly and PwD participate in consultations</p>	<p>Review and data compilation from list of participants to consultations and workshops from PEARS and LAAP.</p>	<p>Annual</p>	<p>MNRE DMO MWSCD PMU</p>
<p>Activity 2.4: Extension of floodwalls at Leone Bridge to prevent damage during extreme events</p> <p>- Ensure equitable participation of men and women, youth, elderly and PwD in any community consultations</p>	<ul style="list-style-type: none"> • Number of men, women, young people, PWD and elderly people participating in consultations 	<p><i>At least 200 men and women, youth, elderly and PwD participate in consultations</i></p>	<p>Review and data compilation from list of participants to consultations and workshops from PEARS and LARAP.</p>	<p>Annual</p>	<p>MWTI PMU MNRE</p>

Output 2– Activity 2.2 Operation Manual – Monitoring & Evaluation - Indicators /Targets

Monitoring	Indicators	End-of-project targets	Means of verifications Method/Data sources	Frequency	Data collection partners
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<p>GCF Core Indicators – Key impact potential</p> <p>Sub-activity 2.2.5 Ecosystem-based Adaptation Enterprise Development Programme – including business incubators, technical training for communities, families and households located in 31 villages of the VCRA</p>	<p>Number of beneficiaries living in the 31 villages of the Vaisigano River catchment offered training to participate in EbAED programme</p>	<p>6,000 VRCA beneficiaries</p>	<p>Evidence-based advertising for the Call for proposals across all villages of the VCRA. Newspaper/TV/Radio ads letters to pulenu'u with programmes.</p>	<p>Quarterly</p>	<p>PMU CSSP/MoF SBH MNRE</p>
	<p>Number of beneficiaries living in the 31 villages of the Vaisigano River catchment trained in business to participate in EbAED programme</p>	<p>3,000 VCRA beneficiaries</p>	<p>Training/workshops/meetings attendance list of participants with name/signature and total beneficiaries segregated by gender</p>	<p>Quarterly</p>	<p>PMU CSSP/MoF SBH MNRE</p>
	<p>Number of beneficiaries living in the 31 villages of the Vaisigano River catchment developed business ideas to increase income for their families</p>	<p>800 VCRA beneficiaries</p>	<p>List of business project ideas generated and applied for with CSSP - list of applicants by type of project - from CSSP records on 1st and 2nd Call for proposals.</p>	<p>Quarterly</p>	<p>PMU CSSP/MoF SBH MNRE</p>
	<p>Number of people that benefited from business incubator projects of the EbAED programme.</p>	<p>3,000 people</p>	<p>Statistics from CSSP database - approved projects household profiles with segregated data by gender and age.</p>	<p>Quarterly</p>	<p>PMU CSSP/MoF SBH MNRE</p>
	<p>Number of business projects approved and implemented under the EbAED Programme</p>	<p>500 projects</p>	<p>List of approved households and community projects from CSSP records.</p>	<p>Quarterly</p>	<p>PMU CSSP/MoF SBH MNRE</p>
	<p>Project Output – Sub-activity 2.2.6 Cash-for-work upland restoration and conservation work to reduce flow of water in the watershed.</p> <p>Native afforestation: Planting native species in designated areas. Includes land preparation, planting, maintenance activities.</p>	<p>Number of hectares reforested in the Vaisigano catchment</p> <p>Number of native trees planted in the reforestation programme of the Vaisigano catchment</p>		<p>Field reports, including maps and site monitoring. Collate data reported on native afforestation, both number of trees planted, and areas covered.</p>	<p>Quarterly</p>

<p>Invasive Species Control: The control of invasive species in the catchment, with a focus on plant species that increase landslide risk and increase debris in flooding.</p>	<p>Number of invasive trees removed/controlled from the Vaisigano catchment</p> <p>New Area controlled in hectares in the Vaisigano catchment</p>		<p>Field reports, including maps and site monitoring. Collate data reported on Invasive species control, both number of trees and area covered.</p>	<p>Quarterly</p>	<p>PMU MNRE-FOR MNRE-WRD MNRE-DEC MNRE-ECCU</p>
<p>Enrichment Planting: Planting native species in forest degraded areas, including areas under high canopy invasive species under management</p>	<p>Number of hectares covered by enrichment planting in the Vaisigano catchment</p> <p>Number of native trees planted in enrichment of ecosystem of the Vaisigano catchment</p>		<p>Field reports, including maps and site monitoring. Collate data reported on enrichment planting, both number of trees and area covered.</p>	<p>Quarterly</p>	<p>PMU MNRE-FOR MNRE-WRD MNRE-DEC MNRE-ECCU</p>
<p>Nursery seedling production: The upscale of MNRE and community nurseries to provide plants needed for upland restoration activities, including collection of wildlings and seeds, soil collection, potting, seedling production and maintenance.</p>	<p>Number of wildlings collected by the cash-for-work units</p> <p>Number of seedlings produced by the nurseries of the programme</p> <p>Number of seedlings dispatched for plantation in the Vaisigano Catchment</p>		<p>Nursery weekly reports. Collate data reported on collection of wildlings and seedling production.</p>	<p>Quarterly</p>	<p>PMU MNRE-FOR MNRE-WRD MNRE-DEC MNRE-ECCU</p>
<p>Eco-tourism and Trail maintenance: Maintenance & rehabilitation of national parks and reserves, protected sites, tracks & trails</p>	<p>Area of ground maintenance in maintenance of parks and reserves</p> <p>Km of trails maintained in parks and reserves and areas in the Vaisigano</p>		<p>Field work weekly report from MNRE Division responsible.</p>	<p>Quarterly</p>	<p>PMU MNRE-FOR MNRE-WRD MNRE-DEC MNRE-ECCU</p>
<p>Fencing demarcation: Physical demarcation of protected and no development zones by appropriate fencing and signage</p>	<p>New Area fenced for the demarcation of no development zones</p> <p>Number of km/meters of fences erected</p>		<p>GIS mapping through GPS demarcation and area measurements</p> <p>Field work weekly report and field measurements.</p>	<p>Quarterly</p>	<p>PMU MNRE-FOR MNRE-WRD MNRE-DEC MNRE-ECCU</p>
<p>Ground-truthing/biodiversity surveys: Biological and ecological surveys conducted by environmental management students from</p>	<p>Number and type of field surveys conducted.</p> <p>Number of plots established for ground-truthing and other surveys</p>		<p>Survey Reports and quarterly reports on Activity 2.2 review.</p>	<p>Quarterly</p>	<p>PMU MNRE-FOR MNRE-WRD MNRE-DEC MNRE-ECCU</p>

NUS and field workers, including ground-truthing.					
Training for cash-for-work participants: Training scope will include Occupational Safety and Hazard and first aid and others relevant to the type of employment.	Number of green job trainings and types under the cash-for-work programme. Number of participants certified through these training programmes.		Review of Training Reports Data collation from list of participants from training reports	Quarterly	PMU MNRE-FOR MNRE-WRD MNRE-DEC MNRE-ECCU

Output 3 - Core Indicators / Targets

Monitoring	Indicators	End-of-project target	Means of verifications Method/Data sources	Frequency	Data collection partners
Project Output 3: Drainage in downstream areas upgraded for increased regulation of water flows.	Indicator 1 Number and type of HH (by composition and income bracket, income type) served with flood-proofed drainage in Vaisigano River Catchment	At least 5,000 households benefit from flood-proofed drainage in Apia	Review of Drainage Master Plan design to verify climate resilience. Site visits to verify drainage systems upgraded to withstand flooding; Project beneficiaries list monitored by responsible parties. Make assessment of number of households through analysis of satellite mapping.	Annual	PMU LTA MWTI

Output 3– Gender Action Plan – Monitoring & Evaluation - Indicators /Targets

Activity 3.1: Develop a climate resilient Stormwater Master Plan -Ensure equitable participation of men and women, youth, elderly and PWD in any community consultations as set out in Activity 3.1.3. -Set targets for women, young people, PWD, and older people in paid work emanating from implementation of the Master Plan as set out in Activity 3.1.5	<ul style="list-style-type: none"> Number of men, women, young people, PWD and elderly people participating in consultations 	At least 200 men and women, youth, elderly and PWD participate in consultations	Review and data compilation from list of participants to consultations and workshops on the Stormwater Master Plan and drainage upgrades. Assess proportion in participation by men and women, youth, elderly and PWD.	Annual	PMU MWTI LTA MNRE MWSCD
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<p>Activity 3.2: Upgrade drainage systems and outfalls in hazard areas to accommodate flooding events -Ensure equitable participation of men and women, youth, elderly and PWD in any community consultations</p>	<ul style="list-style-type: none"> Number of men, women, young people, PWD and elderly people participating in consultations 	<p>At least 200 men and women, youth, elderly and PWD participate in consultations</p>	<p>Review and data compilation from list of participants to consultations and workshops on the Stormwater Master Plan and drainage upgrades.</p> <p>Assess proportion in participation by men and women, youth, elderly and PWD.</p>	<p>Annual</p>	<p>PMU DMO MOH MWSCD</p>

Output 4– Project Management Unit – Monitoring & Evaluation - Indicators /Targets					

Monitoring	Indicators	Method Data source/MoV	Frequency	Data Collection Partners
Environmental and Social risks and management plans, as relevant.	Existence of Environment and Social Impact Assessment within first year of the project Existence of a mechanism through which communities can easily, safely and anonymously submit economic, social or environmental grievances, comments or questions related to project activities and impacts	Updated SESP and management plans Quarterly monitoring reports and minutes from beneficiary meetings	Annual Quarterly	Project Manager Safeguards Officer UNDP CO

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