



SPC
Secretariat
of the Pacific
Community

**Secretariat of the Pacific Community
Government of the Kingdom of Tonga
GLOBAL CLIMATE CHANGE ALLIANCE: PACIFIC SMALL ISLAND STATES
PROJECT DESIGN DOCUMENT**

Trialling Coastal Protection Measures in eastern Tongatapu

AMENDMENT 2

Background

Since the Project Design Document was signed on 13th August 2013, and the first amendment to the project document on 22nd January 2014, it has been agreed between the parties involved that certain activities and budgets will be amended.

One main reason for this is to allocate the contingency funds for the coastal protection measures. It has been recommended by eCoast, the coastal engineering firm that designed the coastal protection measures and is monitoring their implementation, that 5 additional groynes be constructed between the groynes that are 120 meters apart. The aim is to encourage sand recharge at a higher rate, based on the results of the initial beach profiles (Activity 3.2).

The six additional groynes that were originally budgeted for in the project design document, but were not incorporated into the BB construction contract in order to trial the first 9 groynes, are now to be built as well. Additionally, extra costs due to variations in the source of sand for recharge have been incorporated into the changed contract amount with BB construction and are reflected in the revised budget (Activity 2.4).

A third change to the PDD has occurred as the communities have requested the community monitoring and awareness activities to focus on creating coastal recreational areas with rubbish bins and environmental messaging to encourage sustainable use of the coast that is being protected (Activity 1.4). The construction of the recreational areas is to be carried out by BB construction as they are able to complete the recreational areas quickly and at the same time as completing the coastal construction along the same stretch of land. Thus, this will avoid complications from two contractors working on the same piece of land during the same time period. Also, BB construction has a proven track record with the project of providing quality and timely results.

Additionally it has been agreed to support a sand resource research study for purposes of identifying a sustainable source of sand for recharging the coastline in Eastern Tongatapu in the future after this project has been completed. If identified the sand can be used to recharge the area when the coastal protection measures are being implemented as needed in the future, as well as to supply sand for the ADB Strategic Program for Climate Resilience. This research is to be carried out by SPC Geoscience Division and the results to be shared with the Government of Tonga (Activity 3.3).


The adjusted project logframe and corresponding payment schedule of this amendment reflect the described changes and can be found in Annex 1 and 2 (changes to the activities and budget are in red text). They form an integral part of this second amendment to the

project design document in Tonga. The total overall budget figure remains the same as in the original Project Design Document signed on 13th August 2013.

All other aspects of the Project Design Document remain the same.

Signed by:

Ministry of Meteorology, Energy, Information, Disaster Management, Environment,
Climate Change and Communication (MEIDECCC)



Mr Paula Ma'u
Chief Executive Officer



Date

9/4/15

Ministry of Finance and National Planning



Mr Tatafu Moeaki
Chief Executive Officer



Date

9/4/2015.

Ministry of Infrastructure

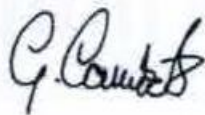

Mr Ringo Fa'oliu
Chief Executive Officer



Date

10/4/2015

Secretariat of the Pacific Community



Dr Gillian Cambers, Project Manager
Global Climate Change Alliance: Pacific Small Island States

Date 08.04.15

Annex 1: Project Log Frame v2 April 2015

Trialling Coastal Protection Measures in eastern Tongatapu, Tonga			
Description	Verifiable Indicators	Verification Sources	Assumptions
Overall Objective: Increase resilience to climate change impacts in Tonga.	<ul style="list-style-type: none"> • Minimum 2 new modes of delivery available for climate change adaptation and coastal management by 06/2015. • Climate change adaptation /disaster risk reduction measures incorporated into a diagnostic study that informs an integrated coastal management plan by 06/2015. 	<ul style="list-style-type: none"> • Annual reports and budgets for Tonga Government agencies • Project reports • Lessons Learnt documentary on coastal protection • Pacific Climate Change Portal • Diagnostic study for an Integrated coastal management plan 	.
Purpose: Trial coastal protection measures in eastern Tongatapu.	<ul style="list-style-type: none"> • Lessons learnt from these coastal protection interventions shared with other Pacific island nations and stakeholders in Tonga by 12/2015. • At least 50 stakeholders from national government, local government and communities provide input (written or verbal) to the diagnostic study to inform an integrated coastal management plan by 03/2015. 	<ul style="list-style-type: none"> • Annual reports, work plans, budgets for Tonga Government agencies • Project reports • SPCR- ADB and GIZ-ACSE reports • Diagnostic study for an Integrated coastal management plan • Coastal monitoring reports • Lessons learnt meeting report • Lessons learnt video 	<ul style="list-style-type: none"> • Communities receptive to information and willing to take proactive action • Basic logistics: materials, transport available within project timeframe • Delivery and installation not affected by an extreme weather event or natural hazard e.g. cyclone, tsunami
Key Result Area 1 Education and awareness on coastal management in the context of climate change enhanced in Tonga.	<ul style="list-style-type: none"> • Communications schedule of education and awareness activities prepared by 06/2014. • At least four education and 	<ul style="list-style-type: none"> • Annual reports, work plans, budgets for Tonga Government agencies • Communications schedule • Project progress reports 	<ul style="list-style-type: none"> • Schools receptive to taking on board educational activities

Trialling Coastal Protection Measures in eastern Tongatapu, Tonga			
Description	Verifiable Indicators	Verification Sources	Assumptions
	awareness activities conducted by 09/2015.	<ul style="list-style-type: none"> Public awareness materials 	
<p>Key Results Area 2</p> <p>Coastal adaptation measure involving hard and soft protection elements identified, designed and constructed for a vulnerable coastal community in eastern Tongatapu.</p>	<ul style="list-style-type: none"> Coastal protection measures selected, designed and costed by 09/2013 One coastal protection measure completed and in place by 06/2015 	<ul style="list-style-type: none"> Approved Project Design Document Reports on project selection, design and costing Engineer reports Consultant's Reports (eCoast) Stakeholder workshop report Tender Documents Implementation plan Beach monitoring profile 	<ul style="list-style-type: none"> Communities support the selected adaptation measures Suitable staff available for timely recruitment.
<p>Key Result Area 3</p> <p>Effectiveness of the coastal protection measures monitored, in collaboration with other related projects.</p>	<ul style="list-style-type: none"> Staff in MLECC&NR regularly engaged in beach monitoring by 12/2014 At least two schools involved in coastal monitoring by 09/2015 	<ul style="list-style-type: none"> Beach monitoring report Engineering report Project reports School monitoring reports 	<ul style="list-style-type: none"> Community and relevant government agencies willing to adopt monitoring and maintenance activities
<p>Key Result Area 4</p> <p>Capacity of key stakeholders in Tonga enhanced to plan for coastal change in the context of climate variability and change</p>	<ul style="list-style-type: none"> Diagnostic study for a coastal management plan prepared by 03/2015 	<ul style="list-style-type: none"> Project reports Diagnostic study for integrated coastal management plan and supporting documents 	<ul style="list-style-type: none"> Consultant available to undertake the plan preparation Buy-in from communities and government

Trialling Coastal Protection Measures in eastern Tongatapu, Tonga			
Description	Verifiable Indicators	Verification Sources	Assumptions
<u>Activities</u> 1.1 Develop a communications plan to schedule delivery of education and awareness activities during the project. (This will be included as a sub-set of the climate change communications plan funded under the project's mainstreaming component) 1.2 Engage communities in eastern Tongatapu through a series of meetings during project life and raise level of understanding about coastal management and climate change adaptation. 1.3 Implement at least six different awareness and education activities relating to coastal management and climate change adaptation e.g. brochures, school activities, community billboards in Tongatapu. 1.4 Construct a coastal recreational areas in each of the three communities with positive environmental messages 2.1 Hire one civil engineer who will be based in MLECCR to (a) assist with tendering for the project, (b) oversee the project and (c) liaise with the Ministry of Infrastructure.	<u>Means</u> Technical assistance Information sharing systems Missions to countries Meetings and consultations Training activities Procurement of equipment and transportation Media involvement Reporting and evaluation	<u>Indicative costs</u> Indicative cost €0.5 million	

Trialling Coastal Protection Measures in eastern Tongatapu, Tonga			
Description	Verifiable Indicators	Verification Sources	Assumptions
<p>2.2 Prepare detailed design and costing of at least two coastal protection options for eastern Tongatapu and prepare a monitoring plan (already completed and funded under project mainstreaming).</p> <p>2.3 Engage key stakeholders to select coastal protection measures and sites (already completed and funded under project mainstreaming).</p> <p>2.4 Construct the selected coastal protection measures:</p> <p>(a) Detached breakwaters and fill - Eastern Manuka USD 304,549 (includes 10% contingency)</p> <p>(b) Groynes and fill Makaunga and Talafo'ou USD 158,551 (includes 10% contingency)</p> <p>(c) Supervision to ensure construction meets design requirements: External consultants 5 visits USD3,200 per visit + USD 3,000 travels and costs = 5 x USD 6,200 = USD 31,000</p> <p>3.1 Implement a monitoring program to evaluate the effectiveness of the coastal protection measures and changes along adjacent coastal areas (Monitoring plan already designed as part of 2.2)</p> <p>(a) Monitoring and analysis of 55 beach profiles USD 12,000 (Geology</p>			

Trialling Coastal Protection Measures in eastern Tongatapu, Tonga			
Description	Verifiable Indicators	Verification Sources	Assumptions
<p>Division): Car hire USD200/survey, x 10 surveys = USD 2,000; Equipment purchase (Total Station Survey + other minor equipment) = USD 10,000; (b)</p> <p>Evaluation of monitoring results USD 8,000 (external consultants)</p> <p>3.2 Assess performance of structures and adjust as required- to be used to build an additional 5 groynes between the groynes that were 120 meters apart based on recommendations from the evaluation of the beach profiles.</p> <p>3.3 Support sand resource research study for purposes of identifying a sustainable source of sand for recharging the coastline in Eastern Tongatapu.</p> <p>4.1 Prepare a Diagnostic Study for an Integrated Coastal Management plan for Tongatapu that will address coastal changes, including those resulting from climate change, up to 2050 (already budgeted under mainstreaming component).</p>			

Annex 2: Adjusted Payment Schedule

Activity	Budget item (changes in red)	KRA Total (changes in red)	SPENT from Tonga as of 31 st Dec 14	SPENT from SPC as of 31 st Dec 14	Allocated in contract and not yet paid	Total Unallocated Funds Remaining	Tranche 1 + 1a (already transferred to Tonga)		Tranche 2 revised (changes in red)	
	(USD)	USD					USD Tonga	USD SPC/ partner	USD Tonga	USD SPC/ partner
KRA 1 Education and awareness on coastal management in the context of climate change enhanced in Tonga.		61,000	4,090			56,910	8,000		53,000	
1.1 Develop a communications plan to schedule delivery of education and awareness activities during the project. (This will be included as a sub-set of the climate change communications plan funded under the project's mainstreaming component)										
1.2 Engage communities in eastern Tongatapu through a series of meetings during project life and raise level of understanding about coastal management and climate change adaptation.	6,000		2,000 (approx)			4,000	3,000		3,000	
1.3 Implement at least six different awareness and education activities relating to coastal management and climate change adaptation e.g. brochures, school activities, community billboards in Tongatapu.	15,000		2,090 (approx)			12,910	5,000		10,000	
1.4 Construct a coastal recreational area in each of the three communities with positive environmental messages	40,000					40,000			40,000	
KRA 2 Coastal adaptation measures involving hard and soft protection elements identified, designed and constructed for a vulnerable coastal community.		514,100	119,857	7,548	359,955	26,740	483,100		0	31,000

Activity	Budget item (changes in red)	KRA Total (changes in red)	SPENT from Tonga as of 31 st Dec 14	SPENT from SPC as of 31 st Dec 14	Allocated in contract and not yet paid	Total Unallocated Funds Remaining	Tranche 1 + 1a (already transferred to Tonga)		Tranche 2 revised (changes in red)	
	(USD)	USD					USD Tonga	USD SPC/ partner	USD Tonga	USD SPC/ partner
2.1 Hire one civil engineer who will be based in MLECCR to (a) assist with tendering for the project, (b) oversee the project and (c) liaise with the Ministry of Infrastructure.	30,000		21,036			8,964	20,000		0	
2.2 Prepare detailed design and costing of at least two coastal protection options for eastern Tongatapu and prepare a monitoring plan (already completed and funded under project mainstreaming).										
2.3 Engage key stakeholders to select coastal protection measures and sites (already completed and funded under project mainstreaming).										
2.4 Construct the selected coastal protection measures: (a) Detached breakwaters and fill - Eastern Manuka USD 304,549 (includes 10% contingency) (b) Groynes and fill Makaunga and Talafo'ou USD 158,551 (includes 10% contingency) (c) Supervision to ensure construction meets design requirements: External consultants 5 visits USD3,200 per visit + USD 3,000 travels and costs = 5 x USD 6,200 = USD 31,000	484,100		98,821	7,548 (eCoast)	276,750 BB current contract 23,452 eCoast 59,753- BB 6 extra groynes & sand recharge	17,776	463,100		0	31,000
KRA 3 Effectiveness of the coastal protection measures monitored, in collaboration with other related projects		76,000	2,658	-	62,200	11,124	16,000	4,000	42,000	14,000

Activity	Budget item (changes in red)	KRA Total (changes in red)	SPENT from Tonga as of 31 st Dec 14	SPENT from SPC as of 31 st Dec 14	Allocated in contract and not yet paid	Total Unallocated Funds Remaining	Tranche 1 + 1a (already transferred to Tonga)		Tranche 2 revised (changes in red)	
	(USD)	USD					USD Tonga	USD SPC/ partner	USD Tonga	USD SPC/ partner
3.1 Implement a monitoring program to evaluate the effectiveness of the coastal protection measures and changes along adjacent coastal areas (Monitoring plan already designed as part of 2.2) (a) Monitoring and analysis of 55 beach profiles USD 12,000 (Geology Division): Car hire USD200/survey, x 10 surveys = USD 2,000; Equipment purchase (Total Station Survey + other minor equipment) = USD 10,000; (b) Evaluation of monitoring results USD 8,000 (external consultants)	20,000		2,658		8,000 eCoast	9,342	11,000	4,000	1,000	4,000
3.2 Assess performance of structures and adjust as required- to be used to build an additional 5 groynes between the groynes that were 120 meters apart based on recommendations from the evaluation of the beach profiles.	46,000				44,200- BB- 5 extra groynes	1,800	5,000		41,000	
3.3 Support sand resource research study for purposes of identifying a sustainable source of sand for recharging the coastline in Eastern Tongatapu.	10,000				10,000- SPC GSD	0				10,000
KRA 4 Capacity of key stakeholders in Tonga enhanced to plan for coastal change in the context of climate variability and change										
4.1 Prepare a Diagnostic Study for an Integrated Coastal Management plan for Tongatapu that will address coastal changes, including those resulting from climate change, up to 2050 (already budgeted under mainstreaming component).										
5.1 Contingency (for currency changes and bank fees)	5,000	5,000				5,000				5,000
Total	656,100	656,100	12,6605	7,548	422,155	99,792	507,100	4,000	95,000	50,000

Payment 1a, the Tonga Pa'anga equivalent of USD 44,000 and Payment 1b, the Tonga Pa'anga equivalent of USD 463,100 has been paid to the Government of Tonga on signing the Project Design Document and Amendment 1.

Upon signing of this second amendment, a request letter, and a full acquittal of 80% of the first payments (Payments 1a and 1b totalling USD 507,100), Payment 2 can be transferred. Acquittals must be supported by receipts. Annual government audits will be sufficient unless any accounting or financial problems emerge. Any interest accruing from the advances paid by SPC shall be considered as income for the purpose of operating this project. It may be used to cover eligible costs of the operation.

Quarterly financial reporting is required with the specific template for Tonga.

The Government shall oversee accurate and regular records and accounts of the implementation of the operation.

- Financial transactions and financial statements shall be subject to the internal and external-auditing procedures laid down in the financial regulations, rules and directives of SPC.
- All original substantiating documents relating to each financial transaction shall form part of the monthly acquittal.
- Reimbursements of funds shall only be made on receipt of the proper acquittal of the funds already advanced.
- Fixed assets (equipment): All fixed assets (equipment) will remain the property of SPC until the closure of the project. On closure of the project the assets will be officially handed over by SPC to the respective stakeholders in the country. An asset register of all assets purchased should be kept in the office of the Government.