

BAMBOO BAY

KOMUNITI TOTEL MANEJMEN PLAN 2025



EUROPEAN UNION



Sweden
Sverige



Pacific-European Union Marine Partnership Programme



Secretariat of the Pacific Regional Environment Programme



© Secretariat of the Pacific Regional Environment Programme (SPREP), 2025

Aknolejmen:

Buk ia hemi blong SPREP. I oraet blong mekem kopi blong buk ia wetem ol samting we i stap insaed long hem blong yusum long skul o long nara fasin we i no blong winim mani, be yu mas aknolejem SPREP mo mekem i klia se kopi we yu mekem i kamaot long wanem buk. I tabu blong mekem kopi blong salem o winim mani long hem sapos olgeta we oli gat raet long buk ia oli no raetem leta blong givim raet long yu fastaem.

SPREP Library Cataloguing-In-Publication Data:

Bamboo Bay Community Turtle Management Plan. Apia, Samoa : SPREP, 2025
60 p. 29cm.

ISBN: 978-982-04-1435-8 (print)
978-982-04-1437-2 (ecopy)

1. Totel blong solwota – Ekologi – Vanuatu. 2. Totel – Protektem – Vanuatu. 3. Totel – Manejmen – Planem – Vanuatu. I. Bartlett, Christopher. II. Donald, James. III. Komet, Andrew. IV. Komay, Hubert. V. Pacific Regional Environment Programme (SPREP). VI. Title.

597.9209595

Sitem ripot olsem:

Bartlett, C., James, D., Komet, A. and Komay, H. 2025. Bamboo Bay Community Turtle Management Plan. Secretariat of the Pacific Regional Environment Programme. Apia, Samoa. 60 pp.

Teknikol Riviū

Ken Kassem
Anissa Lawrence
Kalo Pakoa

Edit

Footprints in the Sand
Savvy Vanuatu

Translesen:

Savvy Vanuatu

Laeaot mo Disaen

Savvy Vanuatu

Pikja:

Grin Totel we hemi jus hatj bifo oli lego hemi go lo solwota. Bamboo Bay, Malekula, February 2022.
Foto hemi blong Christopher Bartlett.

Disklema:

Ripot ia oli bin raetem mo printim wetem sapot blong mani weh kam long Pacific-European Union Marine Partnership (PEUMP) Programme, weh hemi karem mani long European Union mo Kavman blong Sweden. Ol luk luk mo tink tink weh stap insaed long ripot hemi no kam stret long European Union or Kavman blong Sweden. Ripot oli raetem long gudfala tink tink, mo oli bin tekem plante kea mo luk luk long hem. SPREP hemi no responsibol long infomensen weh hemi no korek or sos infomesen hemi haf haf.



9 789820 414358

Lis Blong Konten

Tok Tankyu.....	4
1. Introdaksen	5
2. Pepos Blong Plan.....	8
3. Eria We Plan i Kavaremap	8
4. Bakraon	9
4.1 Komuniti Blong Bamboo Bay Wetem Oi Pipol Blong Hem.....	9
4.2 Kastom Kavenans.....	10
4.3 Tratisonal Kalenda.....	11
4.4 Ekonomik Aktiviti	14
4.5 Wok Blong Konsevesen.....	14
4.6 Weta, Ren Mo Disasta	15
4.7 Exposa Long Oi Disasta.....	17
5. Wok Blong Lukaotem Totel Long Bamboo Bay	19
5.1 Oi Kaen Totel We i Stap	19
5.2 Laef Blong Oi Totel	19
5.3 Oi Ples Blong Totel Long Bamboo Bay	20
5.4 Wok Blong Monitarem Oi Totel	23
5.6 Wok Blong Rekodem Totel Mo Ripotem	25
5.7 Wok Blong Makem Oi Totel Mo Faenem Olgeta Bakegen.....	27
5.8 Wok Blong Monitarem Tempreja Blong Sanbij.....	28
5.9 Test Blong Yusum Elektronik Rekod Sistem	29
5.10 Loa Blong Totel.....	29
6. Oi Woman Mo Oi Pipol Wetem Spesel Nid	30
7. Oi Jalens Mo Problem Long Wok Blong Lukaot Totel	32
8. Oi Aksen Blong Tekem Blong Adresem Oi Jalens Mo Oi Problem la.....	34
9. Monitaring Gaedlaen	44
Pat I. Gaedlaen Blong Hao Blong Tagem Mo Rekodem Mama Totel Taem We i Stap Layem Eg	44
Pat 2. Gaedlaen Blong Muvum Nes Blong Oi Totel	51

Lis Blong ol Pikja

Figure 1 Map of Malekula Island showing Bamboo Bay area	9
Figure 2 Chief system in Bamboo Bay	10
Figure 3 Conservation areas in Bamboo Bay (unregistered)	15
Figure 4 Average monthly weather including minimum temperature, mean temperature, maximum temperature and rainfall 1991–2020 for Malampa Province, Vanuatu	17
Figure 5 Average temperature in Malampa Province, Vanuatu 1901–2021	17
Figure 6 Average rainfall in Malampa Province, Vanuatu 1901–2021	17
Figure 7 Cyclone Pam track in March 2015 (red line)	18
Figure 8 Male turtle with female (top), mother turtle digging nest (bottom left) and laying eggs (bottom right) at Bamboo Bay (Credit: Christopher Bartlett)	20
Figure 9 Map of Bamboo Bay and Dickson Reef showing turtle nesting beaches	22
Figure 10 Pictures of nesting beaches in Bamboo Bay	23
Figure 11 Turtle nest marker using bamboo stick	24
Figure 12 Green turtle tracking route (Limpus)	29
Figure 13 Temperature logger at Bamboo Bay	30
Figure 14 Electronic recording system trialled at Bamboo Bay	30
Figure 15 Nest with hatchlings damaged by dogs, cattle and crabs in Bamboo Bay	34

Lis Blong ol Tebol

Tebol 1. Kastom kalenda blong Bamboo Bay	11
Tebol 2. Oi wok blong totel konsevesen long Bamboo Bay	16
Tebol 3. Oi disasta we i afektem Bamboo Bay kasem 2022	18
Tebol 4. Oi ples we totel i mekem nes blong hem long Bamboo Bay	21
Tebol 5. Oi wok blong ol totel monita long Bamboo Bay	25
Tebol 6. Rekod blong ol totel long Bamboo Bay mo Dickson Reef (i no gat rekod long 2016).....	27
Tebol 7. Rekod blong totel long wanwan sanbij long Bamboo Bay mo Dickson Reef long yia 2004 kasem 2019 (WSB).....	27
Tebol 8. Rekod blong tagem totel long Vanuatu wetem Bamboo Bay (rekod ia i kam long TREDS databases blong SPREP).....	28
Tebol 9. Oi totel we oli tagem long Vanuatu mo faenem long nara ples (rekod ia i kam long TREDS databases long SPREP).....	29
Tebol 10. Oi problem mo jalens blong lukaotem totel long Bamboo Bay.....	33
Tebol 11. Wok blong monitarem ol totel long Bamboo Bay	35
Tebol 12. Wok blong reloktem ol nes blong totel long Bamboo Bay	37
Tebol 13. Wok blong kipim pikinini totel i sef taem ol go long solwota.....	38
Tebol 14. Wok blong manejem rekod blong ol totel long Bamboo Bay	39
Tebol 15. Wok blong serem infomesen wetem ol nara komuniti long Bamboo Bay mo aotsaed.....	40
Tebol 16. Ekonomik aktiviti tru long konsevesen mo sustenbol resos manejmen.....	42
Tebol 17. Wok blong manejem program long Bamboo Bay	43



Grin Totel (*Chelonia mydas*). Foto hemi blong Freepik

Apruvol Blong

Bamboo Bay Komuniti Totel Manejmen Plan blong protektem mo lukaotgud long ol totel long Bamboo Bay, Saotwes Malekula.

Wetem raet we ol pipol mo komuniti blong Bamboo Bay i gat, anda long sekSEN 5 blong plan ia, mifala ol pipol blong Bamboo Bay we ol Jif mo Jeaman blong Saotwes Eria Kaonsel oli representem mifala, mifala i agri long Komuniti Totel Manejmen Plan ia.

Jif, Bamboo Bay Komuniti:

Nem HILAIR.

Signeja

Jeaman, Southwest Area Council:

Nem Alestakense

Signeja

Daerekta, Vanuatu Fisheries Department:

Nem SOMPERT GEREVA

Signeja



Daerekta, Department Of Environmental Protection And Conservation:

Nem GRACE. NAPARAU

Signeja



Jeaman, Bamboo Bay Totel Monitaring Komiti:

Nem Clement Woiherewa

Signeja

Mifala i saenem pepa ia long dei ia: 13 JUNE 2025

Tok Tankyu

Bamboo Bay Komuniti Totel Manejmen Plan i kamaot tru long wok blong fulap difren pipol mo grup we oli givhan. Yumi talem tankyu long Christopher Bartlett wetem Donald James from tufala i raetem fes draf blong plan ia mo oli bin wok wetem ol pipol blong Bamboo Bay mo speseli Jif Andrew Komet wetem Jif Hubert Komay from ol fes tingting we oli givim blong statem plan ia. Ripot hemi bin go tru long riviu wetem Kalo Pakoa mo Ken Kassem long SPREP, mo Vanuatu Fisheries Department, Department of Environmental Protection and Conservation, Wan Smolbag Theatre mo Pathways Project from wok we oli mekem blong lukluk tru long draf blong plan ia. Bamboo Bay Komuniti Totel Manejmen Plan i kam rialiti tru long sapot blong By-catch and Integrated Ecosystem Management (BIEM) Initiative we SPREP i lidim anda long Pacific-European Union Marine Partnership Programme we European Union wetem Gavman blong Sweden i givim mane blong hem.



Grin Totel we hemi jus hatj bifo oli lego hemi go lo solwota, Bamboo Bay, Malekula, February 2022.
Foto hemi blong Christopher Bartlett.

1. Introdaksen

Bamboo Bay hemi wan impotent ples long Malekula we ol totel oli mekem nes long hem, speseli ol grin totel mo hoksbil totel. Long 1990s i kam, komuniti blong Bamboo Bay i bin stap monitarem mo lukaot ol totel, ol nes blong totel mo ol pikinini blong totel. Wan long ol olfala long viley, Noel Kaibaba, hemi fes totel monita long Bamboo Bay we Wan Smolbag (WSB) totel program i trenem hem. WSB totel program i mekem bigfala wok blong leftemap mo sapotem wok we komuniti i stap mekem blong lukaotem totel, tru long fanding we ol projek blong SPREP i givim. Wok blong monitarem totel i stap gohed yet, be i no isi blong mekem wok ia from pipol i wok olsem volontia nomo mo i no isi blong oli interes long wok ia oltaem. Second poen emi from i had blong meksua se i gat mone i stap oltaem blong sapotem wok ia.

Ol olfala olsem Noel Kaibaba, Philip Vanua mo Hubert Komay, olgeta nao oli stap mekem wok blong monitarem totel kasem tede. Ol yangfala oli no interest tumas long hem, mo hemia hemi wan konsen. Long yia 2021 taem team blong BIEM project i bin storian long komuniti, oli bin askem sapot blong developem wan kominiti totel manejmen plan blong helpem wok blong lukaotem totel long eria blong Bamboo Bay.

BIEM projek i bin kontraktem wan konsalten blong ranem wan konsaltesen miting wetem kominiti blong Letokas long taem blong nesting long 2021 mo 2022. i bin gat toktok wetem ol nara patna long kavman tu olsem Vanuatu Fisheries Department, Department blong Environmental Protection mo Conservation (DEPC), mo olgeta ekspet long totel long Pacific Island rijen, International Union for Conservation of Nature (IUCN) Marine Turtle Specialist Group (MTSG), mo NGO olsem Vanuatai Risos Monitors blogn Wansmol Bag Theatre we oli stap wok bigwan long eria ia, Threatened and Migratory Species Adviser long SPREP mo BIEM By-catch/CITES Coordinator long TierraMar long Australia, tufala nao i stap leadim wok ia long saed blong technical support.

Plan ia bae hemi helpem ol tingting blong wan wider ‘Community Conservation Area’ long Bamboo Bay area olsem pat blong wok we komuniti i stap mekem blong lukaot totel mo ol nara resos long solwota.



2. Pepos Blong Manejmen Plan

Totel hemi wan anamol we laef blong hem i joenem solwota mo lan, from hemi liv long solwota be hemi kam so blong putum eg. Ol telot oli impotent long kastom blong Vanuatu from mit mo eg blong telot we pipol i kakae, mo sel blong telot hemi spesel blong mekem handikraf mo suvania. Raon long wol, namba blong ol telot i go daon bigwan from pipol oli kilim tumas telot mo spolem eg mo nes blong telot. Wetem ol problem ia, evri kaen telot long solwota i stap long hae risk blong go lus. Anda long intanasonal agrimen ia Convention on International Trade in Wild Flora and Fauna (CITES) we ol kantri long wol oli saenem, blong manejem mo lukaot gud olgeta wael animal mo ol tri lo bus o plans.

Long kantri Seksen 59 (2) blong loa blong Fisheries (Fisheries Regulation Order Namba 28) i stopem fasen blong kilim telot blong kakae be loa ia emi i luksave ol kastom fasin blong yusum telot, mo emi aloaem samfala use blong telot be man i mas karem wan permit long Fisheries Department. Permit ia i kivim hamas telot wan kominiti i save killim blong usum long wan kastom ceremony. Lo ia i protektem tu nes blong telot be enfosmen blong ol loa ia emi no isi tumas from emi needim bigfala mone tumas blong mekem. i Mekem se Loa nomo i no naf blong protektem gud ol telot mo kipim mama telot wetem eg blong em mo ol pikinini blong telot i sef oltaem. Ol kominiti oli mas okanasem gud wok blong olgeta blong lukaotem telot long wanwan eria blong olgeta.

Ol pipol blong Bamboo Bay oli bin stap lukaotem telot long taem finis i kam mo wok ia i stap goheda kasem tedei. Be oli wantem luk ol moa sapot i kam long olgeta blong leftemap wok blong lukaot telot. Oli wantem lukim tu sam developmen we i save helpem ogeta speseli nao long ol wok blong kasem datu blong helpem laef blong olgeta.

Bamboo Bay Komuniti Totel Manejmen Plan bae emi helpem komuniti blong mekem ol tingting ia i kam tru. Emi fes taem we kominiti i kam tugeta blong gat wan kaen plan olsem long manejmen telot. Komuniti i divelopem plan ia long wan fasin we i stret wetem ol loa olsem Environment Conservation Act, Fisheries Act mo ol standed blong kosevesen blong telot long Pasifik rijen mo raon long wol.

Bamboo Bay Komuniti Totel Manejmen Plan ia emi blong ajivim ol stampa tingting ia:

- Protektem mo lukaotgud ol telot olsem wan risos blong yumi tedei mo ol fiuja jeneresen.
- Openem rod blong pipol blong Bamboo Bay i save kasem datu tru long wok blong telot konsevesen tru long wok blong turis.
- Protektem ol ek blong telot long Bamboo Bay mo mekem sua se ol nes i sef oltaem.
- Leftemap save mo abiliti blong ol kominiti Totel Monita blong oli save lukaot gud ol telot risos blong olgeta.
- Helpem wok blong kasem mo save abaot wok blong lukaot telot long Vanuatu, long Pasifik mo raon long wol.
- Helpem kastom fasin blong lukaot ol risos long land mo solwota i kam strong moa.
- Openem rod blong community i wok tugeta mo serem save tru long ol telot risos jampion long ol nara kominiti mo ol nara aelan.

3. Eria We Plan i Kavaremap

Bamboo Bay Komuniti Totel Manejmen Plan i kavaremap olgeta eria we telot i stap putum ek long hem long kastom eria blong Bamboo Bay komuniti, stat long Wingele long saot mo i go kasem Totel Aelan mo i kaveremap eria blong Dikson Reef i go kasem end blong baondri blong SouthWest Area Kaonsel long Tisvel. i gat ol impotent ples we telot i mekem nes long hem truaot long eria ia, be ol main area blong nes emi long eria blong Bamboo Bay. So Komuniti blong Bamboo Bay i agri se olgeta bae oli stap olsem ona blong Bamboo Bay Community Totel Manejmen Plan ia from olgeta nao oli stap mekem bigfala wok finis mo olgeta bae i helpem ol narawan kominiti blong kam full member blong telot netwok long South West Malekula Area. Komuniti blong Bamboo Bay mo Dickson Reef, tufala i stap long not saed blong Southwest Bay eria mo tufala i stap anda long Saotwes Eria Kaonsel.

4. Bakgraon

4.1 Komuniti Blong Bamboo Bay Wetem ol Pipol Blong Hem

Bamboo Bay i stap long not blong eria blong Southwest Bay, long medel blong Lawa wetem Dickson Reef. Kastom eria blong hem i stat long Maunvet Poen long saot mo i go kasem Totel Aelan (Pikja 1). Bamboo Bay i tekem nem blong hem long bambu from emi wan valuable tri we i fulap long eria ia, mo hemi wan impoten resos blong eria ia blong mekem fulap samting. I gat wan komuniti nomo long eria ia we i divaed long fo stesen - Letokas, Lawanemet, Vanavus mo Labuwol. Oi stesen ia oli laen long cost mo evriwan i gat akses long solwota. Letokas wetem Lawanemet stesen nao tufala i stap lidim wok blong lukaotem totel long Bamboo Bay.

I no gat rod blong trak i kasem southwest area mo travel long solowora wetem banana bot emi main fom blong transpot. Lorlo emi Area Kaonsel Senta mo Lawa emi nex comesel senta. I gat ol smol treding sip oli stap visitim Bamboo Bay from Santo mo eapot we i stap klosap hemi Wintua. Plen sevesem long Wintua emi tri taem long wan wik i ko long Vila. Travel i ko long Lakatoro i tekem tu aoa long bot kasem Labubu Jetty, afta nata haf haoa blong kasem Lakatoro. Pasis blong bot kasem Labubu Jetty emi 12,000 vatu wan wei mo 6,000 vatu emi taksi fea kasem Lakatoro.

I gat netwok blong telefon i kasem Bamboo Bay be i kasem nomo daon long sanbis nomo. I kat 240 pipol oli stap long Bamboo Bay eria, mo long namba ia i gat tu we i handikap mo naen wido mo 42% blong ol pipol oli ol aktif man mo woman we oli gat bitwin 18 mo 59 yia. Oi kaen haos we pipol i liv long em emi ol lokol haos we oli mekem long, wood, bambu wetem natanggura, mo i gat small namba blong haos nomo we oli mekem long simen mo kapa. Komuniti emi gat wan niufala wota saplae sistem, wan niufala jiojhaos, wan sola laet sistem, wan praemeri skul, samfala bot, mo wan fanis buluk.

Dei blong wosip blong Komuniti emi long Sande mo i gat tri jioj long community - Witnes blong Jehovah, Katolik mo Presbyterian jej. Oi Witnes blong Jehovah oli biliv se man i no sud vot, mo oli biliv se evri blad i mas ronaot long mit blong animal bifo man i save kakae.



Pikja 1. Map blong Malekula aelan we i soem eria blong Bamboo Bay.

4.2 Kastom Kavenans

Kostom strakja blong Bamboo Bay community hemi gat wan Hae Jif we emi jif blong Novol Traeb, Navol traeb emi traeb blong pipol we oli liv long Bamboo Bay eria. Anda long hem i gat wan Kastom Jif, wan Prinsipol Jif mo ileven Nasara jif eviriwan. Oi nasara jif ia i gat Imory, Mefrakite, Meleben, Imtourua, Bangamolei, Batmangi, Wiawlou, Lekumoa, Momlinge, Lemanrua mo Lerberap. Kastom strakja blong jifly system ia i stap long Pikja 2. Kastom Jif hemi stap olsem jaj blong kot blong sotemaot evri raorao mo problem long komuniti. Prinsipol Jif hemi lukaot long wok blong ol wanwan Divelopmen Komiti, mo hem i risivim ripot blong ol komiti ia blong talemaot long hae Jif. Oi komiti ia i gat Totel Komiti, Laefstok Komiti, Kakao Komiti, Wota Komiti, Helt Komiti, Edukesen Komiti, Turism Komiti, Van-wood Komiti, Agrikalja Komiti mo Jioj Yut Komiti. Vilej jif i apointem ol komiti ia blong oli oganaesem komuniti long wanwan developmen ia insaed long komunity, mo ol komiti ia oli wok kolosap wetem eria kchsel, ofis blong provins mo ol dipatmen blong kavman.

Novol Traeb (Hae Jif)

Kastom Jif (Jaj blong kastom kot)

Prisipol Jif (I lukaot long ol divelopmen komiti)

Nasara 1

Nasara 2

Nasara 3

Nasara 4
Mo ol narawan

Pikja 2. Sistem blong ol jif long Bamboo Bay

Komuniti i kat tu wan asosiesen we oli rejistarem wetem Vanuatu Financial Services Commission (VFSC), nem blong hem 'Letokas Community Association (LCA). Wok blong Association ia emi blong karem ol memba i kam tugeta blong mekem divelopem long komuniti. Ol objektif blong asosiesen ia i blong:

- Meksua se evri pikinini mo ol yangfala i gat akses long edukesen.
- Mekem pipol oli kam mo resilien long impact blong klaemet jenj mo ol natural disasta.
- Lukaotem mo protektem envaeromen blong eria ia.
- Promotem mo manejem business blong turisim.
- Mekem sua se pipol oli gat gud wota mo kakae oltaem.
- Mentenem kastom mo kalja blong ol fiuja jeneresen.
- Lukaot gud helt blong ol pipol mo komuniti.
- Mekem mo pipol oli gat akses long komunikesen.
- Mekem i gat mo riniuabol (olsem sola pawa) eneji mo pipol oli gat akses long hem.
- Leftemap bisnis blong mekem ol prodak we i kam long bus, long garen, long solwota mo ol laefstok, long wan fasin we bae i no yusumaot ol risos ia.
- Sapotem ol grup we oli nidim spesel nid olsem ol woman, ol olfala mo ol diseibol.
- Asosiesen emi no blong mekem profit, be blong helpem leftemap save blong pipol long kominiti.

4.3 Tratisonal Kalenda

Ol wok blong komuniti i dipen bigwan long envaeromen we oli live long em mo ol difdifren kaen weta mo klaemet we i stap olsem san, ren, win, kolkol, taem blo wetwet, drae taem, mo taem solwota i kwaet o i raf. Ol samting ia i difdifren long wanwan eria mo aelan, mo ol jenis we klaemet jenj i stap kosem long yumi tede i afektem wanwan eris long ol difren wei. Long solwota i gat ol difren system we i stap olsem riva we i ron i godaon long solwota, natongtong, rif mo dip solwota aotsaed long rif. Ol difdifren sistem ia i sapotem ol difren kaen animol mo i afektem envaeromen blong solwota i mekem se solwota blong evri komuniti i difren mo i spesel.

Wok blong wawan komuniti emi difren from i dipen bigwan long ol samting ia, be kasem naoia i no bin gat gudfala stadi blong hem blong yumi andastanem. Emi fes taem we komuniti blong Bamboo Bay i kamap wetem wan kastom kalenda olsem. Komunity kastom kalenda emi impoten blong helpem komuniti i mekem klia ol wok blong hem, mo andastanem gud wanem we i stap hapan mo ol jenis long klaemet we i stap afektem yumi. Bamboo Bay tratisonal kalenda (Tebol 1) i kamaot tru long storian we i bin tekples long komuniti.

Tebol 1: Kastom kalenda blong Bamboo Bay (samfala toktok i stap long lanwis blong Saotwes Eria)

Manis	Kastom nem	Ol tri	Ol plant	Ol anamol	Solwota	Weta	
Jenuware	EMBEN Waelken	Frut i raep long ol tri	Flaoa blong aro tri i kamaot (i no open yet)	Fulap mosquito	Solwota i hae, i save kavaremap sanbij	Ples i hot	
		Avokado i redi		Ol faol oli no strong, ol smolsmol faol oli save ded		Taem blong ren	
		Namambe i redi					
Februari	TEP SEY MBEN Flaoa hemi open	Ren i spolem ol frut	Yam i stap gru be rop blong hem i no stap klaem antap yet	Fulap mosquito		Strong win i save kam (saeklon)	
			Samfala yam i redi blong digim	Ol krab oli go putum eg long riva (abenmesepsep)		Weta i stap jenis	
Maj	BESIMIELE Mun i red, hadtaem	Saeklon i save mekem ol tri i foldaon		Fulap mosquito		Taem blong saeklon, ol strong win	
				Tuna fis i plante, gudfala taem blong pulum net		Taem blong ren	
Eprel	EBLENVSE Naviso i open	Taem blong planem wud	Naviso i open mo i redi	Ol smolsmol fis oli go long riva (sinang)	Solwota i save drae gud	Taem blong ren	
		Frut i redi olsem mandarin, aranis, nakatambol, naos	Taem blong planem ol sid	Palolo wom i kamaot long rif	Gudfala taem blong fis		
				Manggru fis i plante			
				Ol fis oli no fraet long ol man			
Mei	ENRERE lif i foldaon	Lif narara i folfoldaon	Taem blong katem mo bonem garen	Namarae i fatfat	Solwota i save drae gud	Taem blong saeklon i finis nao	
					Gudfala taem blong fis	Smolsmol ren i stap foldaon yet	

Manis	Kastom nem	Oi tri	Oi plant	Oi anamol	Solvota	Weta	
Jun	ILOHUK Flaoa i kamaot	Narara i putum flaoa blong hem	Taem blong katem mo bonem garen		Solvota i save drae gud	Ples i stap kam drae	
		Taem blong bonem ol tri long garen					
		Nangae i redi					
Julae	ITUBO i open	Flaoa blong narara i finis	Taem blong planem yam mo banana	Ol flaengfokis oli plante long flaoa blong narara	Solvota i save drae gud		
		Nangae i redi		Ol totel oli stat blong putum eg			
				Ol smolsmol pijin (nasiviru) oli kam long Santo, aftha oli aot bakegen			
Ogis	ISIRSIR i foldaon	Flaoa blong narara i folfoldaon	Taem blong planem ol samting long garen	Ol kaofis oli kam long salo ples		Drae taem	
		Nangae i redi	Taem blong mekem ol kastom, kakae i stap			Ples i kolkol	
Septemba	HIDRIK Niu lif	Ol tri oli stap putum niufala lif	Ol samting i stap gru gud long garen	Waetanis i fulap	Solvota i save kam so bigwan	Ren i stat blong folfoldaon	
			Taem blong stanemap samting blong yam i klaem long hem	Bigfala naora long riva	I no gudfala taem tumas blong fis	Ples i stap kam hot	
			Rop blong yam i stap klaem antap	Ol wael faol oli plante			
				Ol kaofis oli kam long salo ples			

Manis	Kastom nem	Oi tri	Oi plant	Oi anamol	Solvota	Weta
Oktoba mo November	HIOMBLEBLE Kakae i gat nao		Evri samting i grin mo i stap gru	Oi totel oli stap putum fulap eg	Solvota i kwaet	Smol ren wetem smol san
			Evri kakae we man i planem long Eprel i redi, yumi luk frut blong kakae blong yumi nao	Oi faol oli putum fulap eg		Ples i stap kam hot
				Oi krab oli gat eg		
				Oi namalao oli putum fulap eg		
				Oi pijin oli putum fulap eg		
				Oi wael faol		
			Oi kokonas oli redi mo oli braon	Oi totel oli putum eg mo oli kamkamaot long eg		Taem blong ren
			Oi kakae long graon i redi	Oi wael faol oli plante		Saeklon i save kam
			Taem blong tekem rang long namanggi	Oi pijin blong solwota oli kam putum eg long bus (akine)		
			Mekem haos blong yam (ambule)	Oi krab oli karem eg long riva		
				Oi faol oli putum fulap eg		
Disemba	EWULDAO Evri samting i save gru	Namambe i redi	Had blong wokbaot i go long garen, tumas sofmad long rod	Oi faol oli putum fulap eg	Solvota i bigwan tumas wetem ol bigfala wef	Plante ren
		Oi tri we oli gat frut oli stap gru gud be oli karem frut sloslo nomo	I no gat tumas kakae	Had blong lukaotem ol anamol long bus, tumas sofmad		Ples i hot tumas
			Ol las yam	Devel bataflae i kamaot long naet (bebetimes)		
				Ol krab oli karem eg long riva		
				Namalao i stap putum eg		
				Waet/yelo bataflae i kamaot mo i flae i go long solwota mo sofmad		



Hawksbill Totel. Foto hemi blong Silke Baron – Flickr.com

4.4 Ekonomik Aktiviti

Ol pipol blong Bamboo Bay oli laef long ol resos long garen, animol we oli lukaotem, forest mo wael animol long bus mo long solwota. i gat ova 20 buluk evriwan, ol pig mo i gat samwe 100 faol. i bin gat wan fanis buluk kolosap long solwota be emi brokdaon finis mo naoia ol man oli fasem ol buluk blong olgeta nomo. Ol pipol oli karem fis long solwota evri dei, blong kakae mo blong salem long Wintua mo long Lakatoro. Ol mein product we ol pipol oli salem blong kasem datu emi kopra, kakao, mit blong buluk, fis, timba, mo ol krop olsem yam, taro mo banana. Oli mekem drae kakao mo kopra mo salem long wan kampani long Lakatoro. Oli salem tu mit blong buluk long wan sto long Lawa viley mo long ol nara viley long Southwest Bay. Ol handikraf olsem mat, fan mo basket, oli salem long Lakatoro Handicraft Centre. i gat ol nara samting blong winim mani long hem olsem kava, vanila, pinat, sandalwud, fis blong wota, krab, mo hani blong ol sugabag.

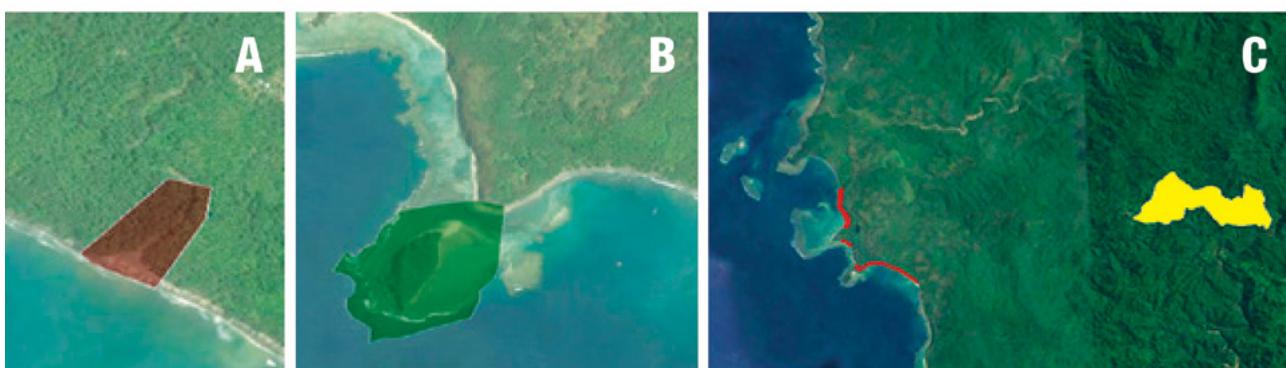
4.5 Wok Blong Konsevesen

Bamboo Bay i gat ol komuniti konsevesen eria we oli setemap samtaem long 1993 long sem taem olsem emia long Wiawi wetem help blong wan Forestri Project we ACIARi putum mone blong em. i gat sapot tu i kam long Malampa Local Kavman Kaonsel blong setemap ol konsevesen eria. Ol konseven eria i gat ol lan baondri blong olgeta mo ol manejmen aktiviti long wanwan erea be emi ol smolsmol eria. Ripot ia i tokbaot ol fes rul blong manejem ol nes blong totel long Bamboo Bay mo ol rul ia i ko olsem:

- Lego ol tri mo ol plant i stap nomo
- No pikimap faeawud o katem wud from eni nara samting
- No laetem faea
- No mekem eni kaen haos
- No digim graon from eni samting

Ripot ia i rekomendem blong setemap wan Gavman konsevesen area, be emi no bin gohed from proses blong rejistarem wan komuniti konsevesen eria i no bin klia long kominiti. Tru long ol konsevesen initiative ia lominiti i bin benefit long samfala sapotem i kam long ol NGO partna olsem Oxfam Vanuatu i kivim wan komuniti wota saplae system long 2015 mo Wan Smolbag i givim wan wota tang mo i bildim wan sef haos long Letokas Vilej.

Projek ia Bycatch and Integrated Ecosystem Management (BIEM) intiative emi wan EU project, anda long Pacific-European Union Marine Partnership (PEUMP) program mo SPREP emi managem Project wetem Vanuatu Government European Union mo Gavman blong Sweden nao i givim datu long projek ia. Olgeta wok we projek ia i stap karem aot emi inkludum ol assesmen blong envaeromen long land mo long solwota ('biological rapid assessment' o BIORAP) long ol paelot saet, putumap ol saen bod blong totel, mo long komuniti totel manejmen plan ia. Ol wok ia bae i helpem komuniti blong lukaot gud envaeromen long lan mo solwota. Ol kaen help we Bamboo Bay komuniti i bin resivim stat long 2005 ikam i stap long Tebol 2.



Pikja 3. Ol konsevesen eria long Bamboo Bay (oli no rejistarem)

A. Louilembemete krab konsevesen eria - 2014

B. Totel Aelan konsevesen eria – 2017

C. Meten Nawoi Consevesen Eria – 2005

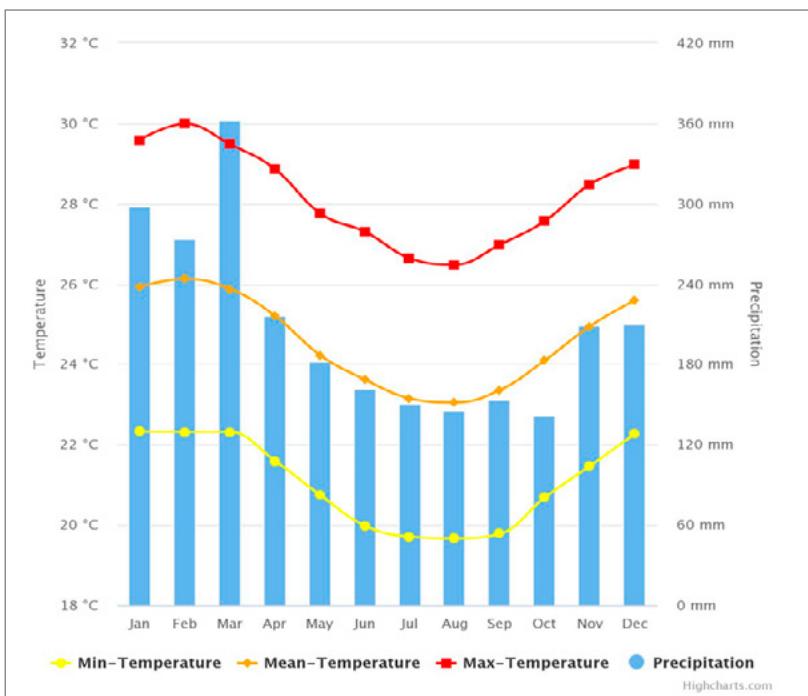
Tebol 2: Oi wok blong totel konsevesen long Bamboo Bay

Yia	Wok we i hapan
2005	Wan Smolbag totel program we Mr Noel Kaibaba hemi lokol monita blong hem. Famle blong Mr Hubert Komul i statem tu konsevesen eria long bus: (1) Meten Nawoi mo (2) Laimblee.
2009	Mr Philip Vanua i statem wok olsem wan nara totel monita.
2012	Oli tagem wan totel long satelaet tag, mo ol trakem long Bamboo Bay kasem Noumea. Oli singaotem totel ia se “Bamboo Lady”.
2014	Island Reach NGO i setemap krab konsevesen eria (3.47 hekta) wetem saen bod blong hem.
2016	Island Reach NGO i kam filmem wok blong lukaot long solwota. Komuniti, wetem advaes blong Watson Vanualai blong Bamboo Bay mo wan memba blong Nguna Pele Marine Protected Area, i setemap wan konsevesen eria we man i no save tekem totel long hem raon long Totel Aelan.
2018	Oli bildim wan totel haos we ol saentis mo ol volontia oli save yusum taem oli kam visit.
2021	Live and Learn Vanuatu i kam wetem wan dron we i flae antap blong tekem klip blong Meten Nawoi mo Laimblee konsevesen eria, wetem tingting blong statem wan REDD+ projek.
2022	Putum ol masin blong monitarem tempreja long ol ples we totel i mekem nes long hem.
2021 / 2022	Konsaltesen toktok wetem komuniti mo raetem draf blong Bamboo Bay Komuniti Totel Manejmen Plan.
2022	BIEM projek i mekem ol BIORAP sove long graon mo solwota long Bamboo Bay.
2023	Setemap ol saen bod blong komunity totel management long komuniti.

4.6 Weta, Ren mo Disasta

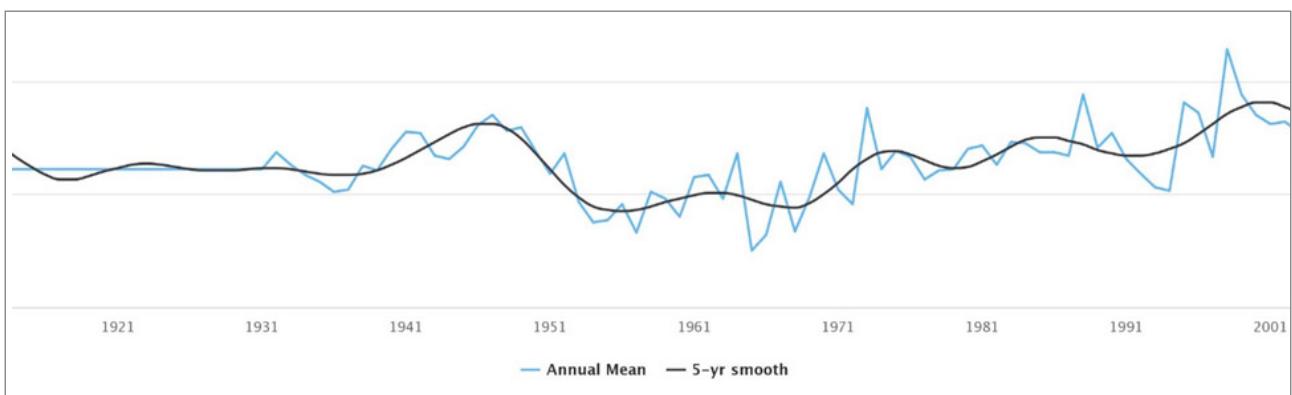
Klaemet blong Vanuatu i no semak long not mo long saot blong kantri. Long not i gat wetwet tropikol klaemet (ples i hot oltaem) mo i gat bigfala ren we i save kasem 4,000 milimita long wan yia. Long saot, i gat wan sabtropikol klaemet we i drae lelebet wetem wan renfol we i kasem 1,5000 milimita nomo long wan ia. Nomol tempreja i stat long 21°C mo i kasem 27°C, mo i dipen plante long taem blong yia. Long hot taem i save bitim 30°C be long kolkol taem i save foldan kasem 20°C. Weta mo ol sisen i stap jenis evri yia follem weta paten we nem blong em “El Niño”. El Niño emi fasin blong jenis long weta insaed long Pacific Ocean we i mekem fulap ren long sam yia mo ples i dry long ol narafala yia. Oi jenis ia emi afektem weta paten long Pasific aelan rigen. Long hot taem i save gat plante saeklon emia long manis Novemba kasem Eprel, be samtaem i save gat some saeklon aotsaed long period ia olsem long ol yia we i jes pas i bin gat tu saeklon i kam aotsaed long saeklon sisen. Figa 4, Figa 5 wetem Figa 6 i soem nomol tempreja wetem ren long wanwan manis blong yia long Malampa Provins. Evri infomesen ia wetem ol jat ia i kamaot long Climate Change Knowledge Portal blong World Bank (2019) ¹.

¹ <https://climateknowledgeportal.worldbank.org/country/vanuatu/climate-data-historical> The World Bank. 2019. The Climate Change Knowledge Portal.

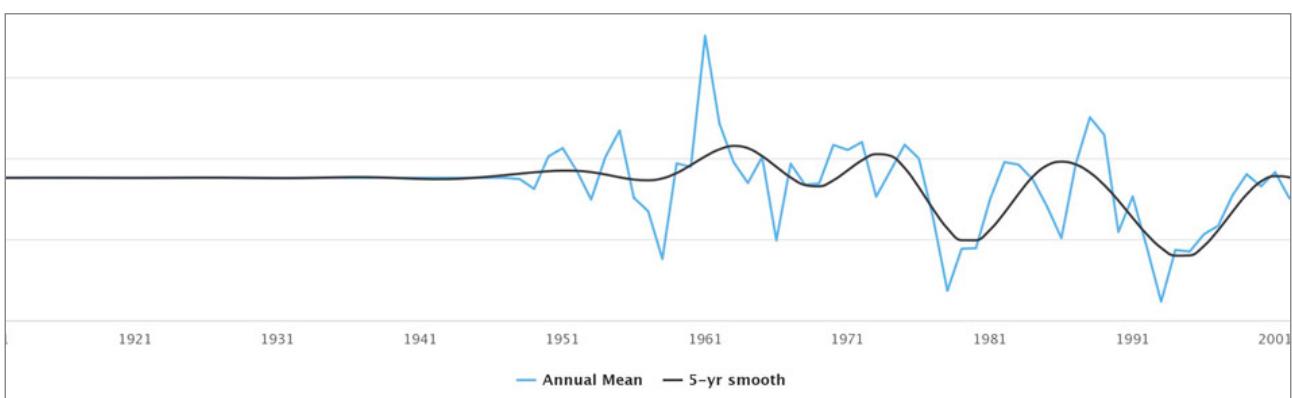


Pikja 4.

Nomol weta long wanwan manis wetem Min Temperature (kolkol tempreja we i save gat), Mean Temperature (nomol o avrej tempreja we i save gat), Max Temperature (hohot tempreja we i save gat) mo Precipitation (hamas ren i save foldaon) long Malampa provins, Vanuatu.



Pikja 5. Avrej tempreja we yumi bin luk long Malampa provins long evri yia, i stat long 1901 kasem 2021.



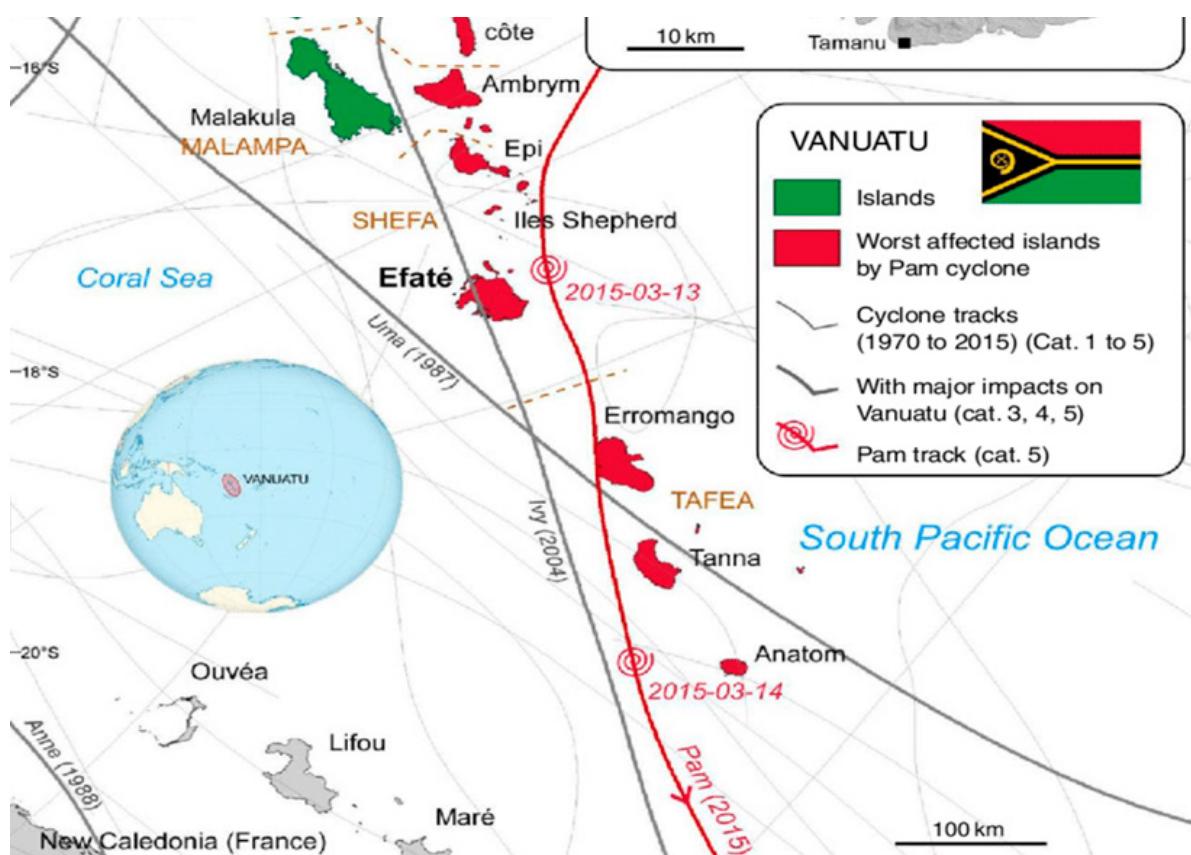
Pikja 6. Avrej ren we i bin foldaon long Malampa provins long evri yia, i stat long 1901 kasem 2021.

4.7 Exposa Long ol Disasta

Vanuatu emi stap long wan rejen we i expos tumas long ol natural disasta i makem se evri aelan komuniti oli expose long ol damej blong disasta. Samfala disasta we i bin afektem West Malekula mo Bamboo Bay area, long taem bifo i kam, olsem we komuniti i storian blong hem (Tebol 3).

Tebol 3. Ol disasta we i afektem Bamboo Bay kasem 2022

Yia	Disaster description
1700s	Taedol wef (long taem blong Captain Cook)
1940/1941	Faea long ol hil klosap
1951/1952	Bigfala wota i mekem flad long evri ples long komuniti
1951	Hariken ²
1965	Etkwek – i brekem rif mo hil
1967	Hariken
2015	Saeklon Pam (Pikja 7)
2015/16	El Niño drae taem
2015/16	Faea we ol man i statem i bonem ol garen, i bonem haos, i bonem kokonas
2022	Taedol wef we volkeno long Tonga i kosem i brekem wan bigfala ston long solwota



Pikja 7. Rod blong Saeklon Pam long Maj 2015 (red laen)

² D'Aubert A.M and Nunn P.D. 2012. Furious Winds and Parched Islands: Tropical Cyclones (1558–1970) and Droughts (1722 – 1987) in the Pacific. https://books.google.vu/books?id=FThPAAAQBAJ&redir_esc=1



Niufala bebe Leatherback totel. Foto hemi blong Karen Parker – Flickr.com

5. Wok Blong Lukaotem Totel Long Bamboo Bay

5.1 OI Kaen Totel We i Stap

I gat trifala kaen totel ia we oli save mekem nes long Bamboo Bay:

- Hoksbil Totel (*Eretmochelys imbricata*): i stap long bigfala denja ('critically endangered') long wol
- Grin Totel (*Chelonia mydas*): i stap long denja ('endangered') long wol
- Letabak Totel (*Dermochelys coriacea*): bambae hemi save stap long denja long fija ('vulnerable') long wol, be i stap long bigfala denja finis ('critically endangered') long wes Pasifik

Oi rekod i soem se grin totel hemi topem namba blong nes long Bamboo Bay, komperem wetem hoksbil totel mo letabak totel mo i soem se kaen sanbij long Bamboo Bay emi gud long grin totel.

5.2 Laef Blong ol Totel



Pikja 8. Man totel i go wetem woman totel (top), mama totel i mekem nes (bottom left) mo i laim eg (bottom right) long Bamboo Bay. Christopher Bartlett i tekem ol pikja ia.

Totel hemi wan anamol we i save laef longtaem mo i kro slo. Oi totel i tekem longfala taem blong save mekem pikinini araon 20 yia kasem 50 yia olsem. Oi mama totel oli kamsho blong putum eg long sanbij. Wan mama totel i save putum bitwin 50 mo 130 eg long wan nes mo hemi save mekem samfala nes long wan sisen. Eg blong totel emi brok afta long 21 dei afta emi putum ol pikinini totel oli kamaot long nes mo oli wokbaot i go long solwota. i gat fulap pikinini totel oli go long solwota be fiu nomo bae oli laef kasem taem oli bigwan. Oi totel oli liv long solwora

long laef blong olgeta, mo oli kakae gras blong solwota mo ol smaoi anamol olsem jelifis mo shelfis. Oli stap kam klosap long aelan blong lukaotem kakae mo taem oli redi blong mekem pikinini. Wan mama totel bae i kam so long sem ples we hem i bon long hem. i gat mo infomesen long saed blong laef blong ol totel long wan ripot we Projek ia i putum aot long tis year we taetol blong em “A review of the management & conservation of sea turtles in Vanuatu (Hickey et al. 2023)”.

Long taem blong mekem pikinini, ol man totel mo ol woman totel oli kam tugeta long salo ples we solwota i quaet. Long Bamboo Bay ol totel oli stap tugeta (mating) klosap long sanbij altaem long taem blong putum ek. Samtaem yumi save luk ova ten man totel oli stap raonem wan woman totel. Long taem ia ol mama mo papa totel oli stap long denja blong man i kilim ded from oli no save muv kwik long sandbis.

5.3 OI Ples Blong Totel Long Bamboo Bay

Totel i putum ek long evri sanbij long eria blong Bamboo Bay kasem Dickson Reef kasem Tisbel. OI totel monitor oli dividem ol beach ia i ko long eleven beach evriwan, mo oli nemem everiwan stat long saot kasem baondri blong Tisvel long not (Fig 9 mo 10). Seven long ol beach ia i stap long eria blong Bamboo Bay mo four long eria blong Dickson. OI totel monitors oli namem ol beach ia wetem ol leta olsem Beach A, Beach B, C, D, E, F, G, H, I, J mo K (Tebol 4). Wan ‘Beach’ emi wan sanbij we i stap between tufala points (headland), samfala emi waet sanbij mo samfalal emi black sandbis. Beach A, B C, D, E, F, H mo i emi waet sandbij we solwota i mekem, mo Beach E,F,G, J mo K emi ol blak sanbij we riva i mekem. Waet sanbij i gud long ol hoksbil totel, mo ol grin totel oli likem mekem nes long waet sanbij mo blak sanbij. OI letabak totel oli laekem blak sanbij nomo.

Komuniti blong Bamboo Bay i lidim wok blong lukaotem totel long Southwest Bay Eria mo manejmen plan ia i fokas long komuniti blong Bamboo Bay. Wok blong monitarem ol totel i bin tekples fastaem long eria blong Bamboo Bay nomo, afta i jas spred i go long eria blong Dickson Reef. Dickson rif Kominiti emi talem aot se olgeta tu oli interes blong joenem totel monitoring program. Mekem se ol aktiviti long plan ia i kavaremap ful eria, blong enkarajem komuniti blong Dickson Reef tu blong tekpat long wok blong lukaotem totel.

Tebol 4. OI ples we totel i mekem nes long hem long Bamboo Bay

Ples	Latitud long map	Longitud long map	Lokol nem	Wanem kaen sanbij
Beach A	16°25'8.01"S	167°24'17.11"E	Wingele	Waet sanbij
Beach B	16°24'53.07"S	167°24'24.95"E	Lewilewilemavis	Waet sanbij
Beach C	16°24'30.18"S	167°24'23.06"E	Venaiberaf	Waet sanbij
Beach D	16°23'59.75"S	167°24'17.64"E	Tumarse	Waet sanbij
Beach E	16°23'22.49"S	167°24'20.80"E	Awimarai 1	Blak sanbij
Beach F	16°22'59.08"S	167°24'15.85"E	Awimarai 2	Blak sanbij
Beach G	16°22'28.09"S	167°23'54.79"E	Awilembemete	Blak sanbij
Beach H	16°22'5.05"S	167°23'17.91"E	Lengomose	Waet sanbij
Beach I	16°21'34.46"S	167°23'13.02"E	Letesfinmonai	Waet sanbij
Beach J	16°20'58.29"S	167°23'4.77"E	ifakmoulingara	Blak sanbij
Beach K	16°20'17.09"S	167°22'53.04"E	Lemoran	Blak sanbij



Pikja 9. Map blong eria blong Bamboo Bay mo Dickson Reef wetem ol ples we totel i mekem nes long hem



Beach B (lefsaed) wetem Beach A (raetsaed)



Beach C



Beach D



Beach E



Beach F



Beach G



Beach H



Beach i

Pikja 10. Pikja blong ol beach we totel i mekem nes long hem long Bamboo Bay. Christopher Bartlett i tekem ol pikja ia.



Pikja 11. Maka blong nes blong totel, wan pis bambu we totel monita i raet long hem. Totel monita long pikja emi Phillip Vanua blong Bamboo Bay. Christopher Bartlett i tekem foto ia.

5.4 Wok Blong Monitarem ol Totel

Wok blong monitarem ol totel hemi wan wok we ol volontia blong komuniti oli mekem mo Wan Smolbag (WSB) i sapotem olgeta. Bigfala wok i tekples long sisen we i stat long Julae kasem Eprel evri yia we hemia hemi taem we ol totel oli stap kam so blong mekem pikinini moputum ek. Wok blong monitarem ol totel long Vanuatu i stat long 1990s, folem ol kampen we SPREP totel program i mekem raon long Pasifik long saed blong totel konsevesen . Long Bamboo Bay, wok blong monitarem ol totel i stat long 2005 wetem sapot blong WSB.

Oi wok blong monitarem totel long Bamboo Bay i stat long taem we oli totel oli stat blong kam so, long manis Ogis mo Septemba. Oi totel monita blong kominiti oli visitim ol nes blong jekem se i no gat damej, putum maka long ol niufala nes mo tagem ol totel. Oi maka blong nes emi blong helpem identifaem ol niufala nes. Oli yusum bamboo mo piswud blong raetem deit we totel i layem ek mo deit we bae ol egg i brokbrok mo ol smolsmol totel oli go bak long solwota (Figa 11). Oi monitor oli tagem ol mama totel mo oli rekodem evri infomesen befo totel i go bak long solwota.

Olgeta totel monita oli stap wokbaot nomo blong mekem wok blong monitarem totel, mekem i had wok blong stap visitim every beaches long dei mo long naet. Oi beach olsem Beach A, B, C, D mo F emi had blong wokabaot kasem from ol poen long ples ia blokem rod blong man mo i long wei long vilej. Kenu o bot nomo i save kasem ol beach ia long taem solwota i gud. Oi totel monita long Bamboo Bay oli stap enkarejem ol nara kominiti blong lukaotem totel mo taem oli luk wan youngfala we i interes, oli rekomedem em i ko long trening wetem Wansmol Bag Totel workshop. Olsem exemplol i gat wan niufala totel monita i stap wok long Dickson Reef Komuniti mo youngfala ia wan long olgeta monita long Bamboo Bay Mr Philip Vanua nao i helpem hem mo kivim trening long hem.

Taem ol monita oli faenem wan nes we solwota i kavaremap o damejem, oli digimaot mo oli muvum i go long wan smol fenis farawe long solwota. Afta sam taem oli monitor oli faenem i had blo stap mekem fanis be oli be oli muvum nest nomo i ko lo wan nara ples we i sef. Tebol 5 i soem ol impoten wok we ol totel monita oli mekem long taem we totel i putum eg:

Tebol 5. Ol wok blong ol totel monita long Bamboo Bay.

	Aktiviti	Wok blong mekem
1	Faenemaot ples we totel i mekem nes long hem	Faenemaot wanem eria we nes i stap long hem mo rekodem hemia.
2	Putum maka long ol nes wetem deit we totel i mekem nes long hem mo deit we ol smolsmol totel oli sud kamaot long hem	Taem wan mama totel i kavaremap nes blong hem finis, hemi taem blong putum maka long nes nao. Ol monita oli raetem deit we mama totel i laim ek mo estimet deit we ol smolsmol totel bae oli kamaot mo oli raetem deit ia long wan pis baboo mo putum long stick maka long saed bong nes blong makem.
3	Tagem ol mama totel mo rekodem namba blong ol tag	Monita i jekem se totel ia i gat tag finis o nogat, sapos i nogat, oli pinim wan niufala tag long long wan wing blong em afta we emi berem eg blong hem finis. Afta oli rekodem namba blong tag ia mo sapos i gat tag finis, oli rekotem number blon tag. Sapos oli faenem se tag i damej, oli karemaot olfala tag mo oli putum niufala wan moo li rekotem.
4	Jekem ol nes evri dei kasem taem we ol smolsmol totel oli kamaot	Ol monita oli monitarem ol nes evri dei long dei mo long naet wetem tojlaet, blong ronem aot dog we oli stap damejem ol nes. Hemi wan bigfala wok blong stap mekem voentia wok olsem blong stap lukluk long evri beach long eria ia.
5	Wajem ol smolsmol totel taem oli kamaot long naet	Wajem ol smolsmol taem totel oli kamaot long naet blong meksua se oli sef mo oli save kasem solwota mo mekem sua dog ino attakem olgeta taem oli stap go long solwota.
6	Muvumaot nes we solwota i save kavaremap	Taem wan nes i stap klosap tumas long solwota, solwota i save spolem nes long taem we solwota i nogud. Ol monita oli stap wajem gud ol nes ia, mo sapos oli luk se wan nes i no sef, oli digimaot ol ek mo tekem i go long wan sef ples or insaed long wan bambu fenis, mo berem bakegen. i no sef tumas blong muvum ol eg from plante i save ded sapos oli no putum gud be oli mekem nomo wanem oli save mekem.
7	Kaontem ol eg we i brok finis	Oli save digimaot ol eg we i brok finis mo oli kaontem olgeta, blong jekem hamas smolsmol totel i bon, be oli no mekem hemia long evri nes from emi no isi blong save stret taem we ol ole k lbrokbrok.
8	Rekodem namba blong ol tag mo ol nes blong totel long pepa blong TREDS mo sendem long WSB.	Oli raetemdaon infomesen ia long rekod pepa (log sheet) mo oli sendem long WSB long en blong sisem, o wan ofisa blong WSB i save kolektem taem hemi kam visit.
9	Usum ol tul long work blong totel monita	Ol monita oli yusum ol samting olsem tojlaet, baket, renkot, sped, mo rekod pepa mo pen.

5.6. Wok Blong Rekodem Totel mo Ripotem

Long ol ples we totel i mekem nes long hem, i gat rekod blong ol impoten infomesen ia:

- hamas nes we evri kaen totel i mekem long evri sisen;
- hamas totel i kam long Bamboo Bay we oli karem tag blong Vanuatu, mo ol namba blong tag;
- hamas nes mo eg we ol monita oli muvumaot;
- hamas nes we solwota i spolem;
- hamas eg we i nogud mo hamas eg we oli haj.

Oi infomesen ia oli stap entarem i long kompiuta sistem blong SPREP long wan dataase oli kolem TREDS. Databases ia TREDS emi karem rekod blo evri totel nes long Pasifik rijen mo emi stap rekotem totel nes stat long 1973 we long taem ia wok blong kollectem infomesen long Bamboo Bay mo long Vanuatu i no gud tumas yet. Oi rekod we i stap long yia 1973 kasem 2015 i soem 84 grin totel wetem 143 hoksbil totel mo 3 totel we oli no save nem blong em, oli kam nest long Bamboo Bay we i stap long Tebol 6, rekod ia i no stret tumas.

Long yia 2004 kasem 2019 taem WSB i statem totel monitoring program long kantri, i lukim improvemen long informesen wetem rekod blong 1,545 grin totel (92%) mo 129 hoksbil totel (8%) oli kam nes long Bamboo Bay. Hemia i soemaot se wok blong ol totel monita emi impoten long komuniti blong impruvum rekod blong totel mo wok blong WSB program tu emi impoten blong sapotem ol totel monita. i lukim tu se ol niufala rekod i difren tumas komperem wetem emi long bifo long saed blong namba blong grin totel wetem namba blong hoksbil totel mo emi soem se emi impoten blong kolektem stret infomesen.

Taem yumi brekem daon numba blong nes long wanwan Beach olsem long Tebol 7 i soem, se olgeta eleven ples blong mekem nes long Bamboo Bay mo Dickson Reef eria oli impoten long totel evriwan be Beach D, E, F, G wetem i oli more importan from oli kontributim majority blong ol nes (80%) long w eria blong Bamboo Bay mo Dickson Reef.

Nomata se i gat impruvum long ol rekod, i gat sam samting we i nid blong strettem yet. Olsem rekod blong namba blong grin totel i go antap bigwan stat long 2019 wetem 789 koperem wetem long 2012 we i gat 55 totel nomo mo i no gat rekod blong hoksbil totel long ol yia ia wetem 6 nomo long 2014 (Tebol 6) emi resem kweten long kuality blong ol rekod. Wan konsen tu emi fasin blong mekem rekod long pepa emi no gud tumas, from pepa i save lus isi nomo mo i no ko kasem WSB long Vila.

Wan problem we i stap tu se i no gat wan gudfala infomesem sistem long level blong Kavman blong manejem mo ripotem ol infomesen blong totel. Hemia wan nid blong adresem long hae level blong kavman blong impruvum kuality blong infomesem blong totel long kantri. Emi impoten tu blong lukluk lo electronic rekod blong impruvum data collection. Long taem blong filwok blong plan ia, konsultan blong project emi bin testem wan kaen elektronik sistem olsem wetem ol monita long Bamboo Bay mo oli laikem sistem ia from emi isi blong usum be emi rekodem gud infomesen, mo sedem i go daerek long databases. Kavman tru long Fisheries Department, Deparment blong Environment, WSB mo SPREP i nid blong wok tugeta blong divelopem gud wan sistem olsem blong impruvum wok blong totel monitoring mo konsevesen long kantri.

Tebol 6. Rekod blong ol totel long Bamboo Bay mo Dickson Reef (i no gat rekod long 2016)

Yia	Grin totel	Hoksbil totel	Totol we yumi no save wanem kaen	Totol	Ples we infomesen i kam long hem
1972-2015	84	143	3	230	TREDS/SPREP
2004	14	1		15	WSB
2005	17	1		18	WSB
2006	83	32		115	WSB
2007	41	20		61	WSB
2008	26	19		45	WSB
2009	13	28		41	WSB
2010	44	0		44	WSB
2011	61	22		83	WSB
2012	55	0		55	WSB
2013	57	0		57	WSB
2014	135	6		141	WSB
2015	83	0		83	WSB
2016	0	0		0	WSB
2017	99	0		99	WSB
2018	28	0		28	WSB
2019	789	0		789	WSB
Totol	1545	129		1674	WSB

Tebol 7. Rekod blong totel long wanwan Beach long Bamboo Bay mo Dickson Reef long yia 2004 kasem 2019 (WSB)

Yia	Beach A	Beach B	Beach C	Beach D	Beach E	Beach F	Beach G	Beach H	Beach I	Beach J	Dickson Reef	TOTOL
2004											2	2
2005		11			5						1	17
2006				2	5		45	3		1		56
2007					3		12	1				16
2008							8	1	2	1		12
2009						1	4					5
2010					12	2	27	3				44
2011					16	6	26		5	5		58
2012				2	4	1	46		2			55
2013					1		52					53
2014					62	29	44					135
2015					33	30	20					78
2016												0
2017		1	1	33	14	4			31	15		99
2018							28					28
2019		12	2	70	169	77	321	8	84	43	3	789

5.7 Wok Blong Makem ol Totel Mo Faenem Olgeta Bakegen

Ol totel monita long Bamboo Bay oli bin statem wok blong makem ol totel samples afta long yia 2000 mo wok ia i stap gohed yet tedei. Oli yusum wan tul blong stikim ol smol iron tag long han blong totel. Oli makem mama totel taem hemi laim eg finis mo i stap berem nes mo befo emi gobak long solwota. Ol monita oli karem trening long wok ia tru long Wan Smol Bag mo oli stap makem totel evri yia long sisen blong totel i putum ek. Ol olfala monita we oli stap mekem wok ia i gat Noel Kaibaba, Phillip Vanua wetem Jif Hubert mo oli statem wok ia long 2005 i kam. Afta we oli pinim tag oli rekodem namba blong new tag, oli rekodem tu numba blong tag long totel we i gat tag finis.

Total namba blong ol totel we oli tagem long Vanuatu long 1991 kasem 2,596. Aot long namba ia, 208 o 8% nomo oli kambak blong mekem nes bakegen long ol nes long Vanuatu. Namba ia emi smol tumas be i semak long ol nara ples we i gat tagging program blong totel. Long Bamboo Bay aot long fulap mama totel we oli makem, 13 nomo oli kambak blong putum ek, we i gat 6 hoksbil totel mo 7 grin totel (Tebol 8). Olgeta totel ia oli kam fulap nao long Beach G mo H nomo. Wan long ol hoksbil totel we oli makem long Bamboo Bay, oli bin faenem long New South Wales long Ostrelia (Tebol 9),

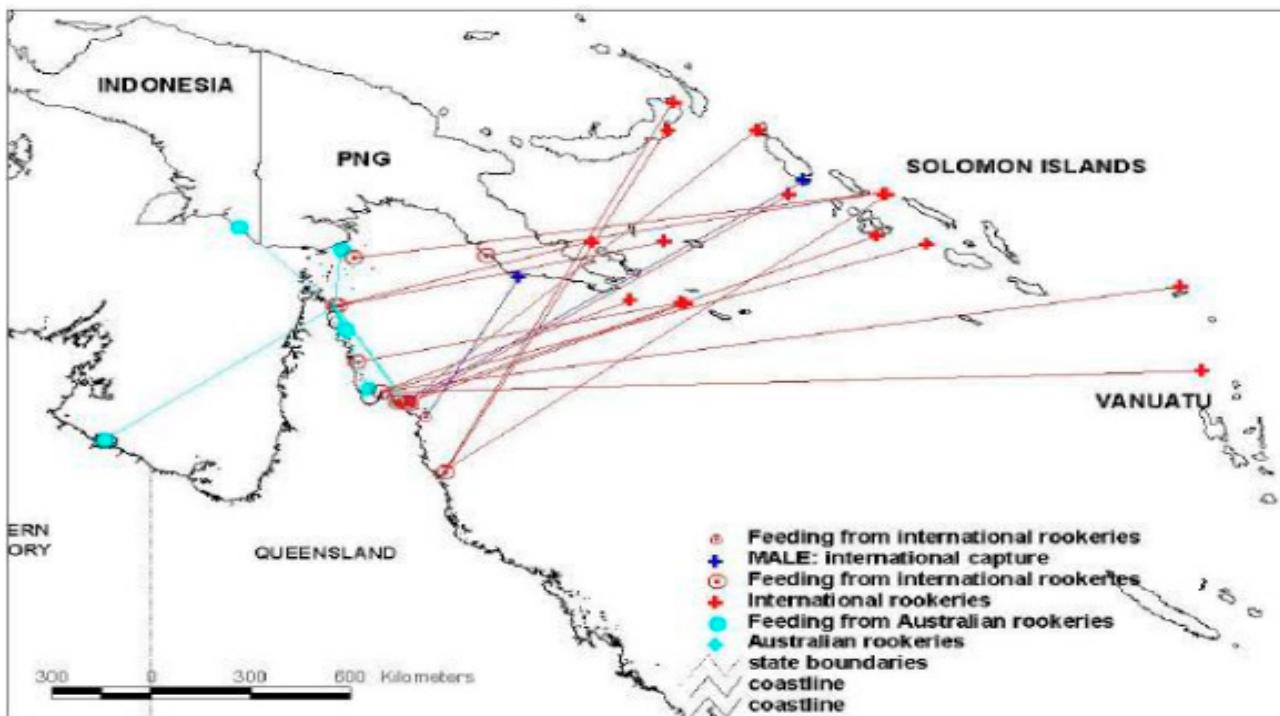
I gat tu wok blong putum wan nara kaen tag bageken we oli kolem satelaet tag we oli save trakem movmen blong em. Sam long ol tag is oli bin putum long totel long Bamboo Bay for folem muvment blong em. Ol study ia we ol scientist oli karem aot long Vanuatu, PNG mo Solomo Island i soem koneksen blong totel population long Pacific rijken (Figa 7) (Limpus 2007 mo Limpus (2007a)³. Ol studi olsem emi impoten mo i nid blong sapotem blong helpem save long konneksen blong totel long rejen lond saed blong wea ples oli kakae, mekem pikinini mo ol risk we totel population i stap fesem.

Tebol 8: Rekod blong tagem totel long Vanuatu wetem Bamboo Bay (rekod ia i kam long TREDS databases blong SPREP)

Namba blong tag	Wanem kaen totel	Man totel o woman totel	Taem oli faenem totel fastaem			Taem oli faenem totel bakegen		
			Deit	Ples	Aktiviti	Deit	Ples	Aktiviti
R31893/ R31892	Grin	Woman totel	29/01/2005	Bamboo Bay	mekem nes	12/12/2008	Bamboo Bay	mekem nes
R31897/ R31896	Grin	Woman totel	02/02/2005	Bamboo Bay	mekem nes	16/12/2008	Bamboo Bay	mekem nes
R38185/ R38184	Hoksbil	Woman totel	17/12/2006	Bamboo Bay	mekem nes	01/01/2007	Bamboo Bay	mekem nes
R37752/ R38018	Grin	Woman totel	01/01/2007	Bamboo Bay	mekem nes	03/01/2007	Bamboo Bay	mekem nes
R38120/ R38119	Hoksbil	Woman totel	09/12/2006	Bamboo Bay	mekem nes	04/02/2007	Bamboo Bay	mekem nes
R38012/ R38011	Grin	Woman totel	04/01/2000	Bamboo Bay	mekem nes	16/01/2007	Bamboo Bay	mekem nes
R38115/ R38114	Grin	Woman totel	24/12/2006	Bamboo Bay	mekem nes	06/01/2007	Bamboo Bay	mekem nes
R38026/ R38024	Grin	Woman totel	17/12/2006	Bamboo Bay	mekem nes	10/01/2007	Bamboo Bay	mekem nes
R38037/ R38038	Hoksbil	Woman totel	12/11/2008	Bamboo Bay	mekem nes	10/12/2008	Bamboo Bay	mekem nes
R41822/ R41823	Hoksbil	Woman totel	21/12/2009	Bamboo Bay	mekem nes	05/01/2010	Bamboo Bay	mekem nes
R41849/ R41850	Hoksbil	Woman totel	23/12/2009	Bamboo Bay	mekem nes	07/01/2010	Bamboo Bay	mekem nes
R41888/ R41889	Grin	Woman totel	07/01/2009	Bamboo Bay	mekem nes	17/01/2009	Bamboo Bay	mekem nes
R41898/ R41900	Hoksbil	Woman totel	11/11/2009	Bamboo Bay	mekem nes	26/12/2009	Bamboo Bay	Mekem nes

Tebol 9: Oi totel we oli tagem long Vanuatu mo faenem long nara ples (rekod ia i kam long TREDS databases long SPREP

Namba blong tag	Wanem kaen totel	Man totel o woman totel	Taem oli faenem totel fastaem			Taem oli faenem totel bakegen		
			Deit	Ples	Aktiviti	Deit	Ples	Aktiviti
R41825/ R41825	Hawksbill	Woman totel	09/12/2009	Bamboo Bay	I mekem nes	20/10/2010	Lake Arrangan Beach, Brooms Head NSW, Ostrelia	I kam so, i ded



Pikja 12: Rod blong ol grin totel we ol saentis oli faenem. Laet blu i soem totel we i kamaot long nes long Ostrelia, red i soem totel we i kamaot long nes long nara kantri, mo dak blu i soem man totel we oli aot long Ostrelia i go long nara kantri (Limpus 2007)

5.8 Wok Blong Monitarem Tempreja Blong Sanbij

Wan stadi blong monitarem envaeromen blong sanbij we totel i putum ek long em i bin tekples long Bamboo Bay mo Wiawi long February 2021 mo 2022 olsem pat blong BIEM Projek (Pikja 8). Eim blong stadi ia emi blong rekodem hao tempreja blong sanbij stap jenis i hot mo i kolkol) mo hao nao ol jenis ia i afeketem kuwaliti blong ek. Yumi save se tempereja blong sanbij emi afektem developmen blong ek olsem hamas mel mo hamas fimele totel. Emia emi impoten from klaemet jenis i stap affectem yumi mo i nid blong mekem kaem stadi olsem blong yumi save ol kaen jenis ia mo hao yumi save manaejem. Oi konsaltan we oli karem aot stadi ia oli komplitim wok be oli no kolektem inaf infomesen blong helpem stadi ia. Emia from ol masin we oli setemap oli lus long taem blong saeklon mo ol consultant tu oli no bin gat gudfala trening blong setemap ol machine ia. Wan samting we yumi faenemaot long stadi ia se i mas gat gudfala trening long komuniti mo local consultan long ol kaen masin blong rekod olsem blong oli save setemap gud ol kaen stadi olsem.



Pikja 13. Totel monita blong Bamboo Bay, Noel Kaibaba, i putum masin blong rekodem tempreja long sanbij. Christopher Bartlett i tekem ol pikja ia.

5.9 Test Blong Yusum Elektronik Rekod Sistem

Elektronik rekod emi technology blong tete blong impruvum infomesen koleksen. Long taem blong konsaltesen meeting long plan ia, konsaltam we i karem aot work ia i bin ranem wan test long elektronik rekod long long Ba,boo Bya mo ol monita oli likem tumas. i mekem se oli identifaem electronic monitoring olsem wan impoten tool insaed long Bamboo Bay Totel Manejmen Plan blong helpem ‘Turtle Research and Monitoring Database System’ (TREDS) <https://treds.sprep.org/help/about> we SPREP i manejem blong sapotem wok blong rekodem ol totel (Pikja 14). Long Intanet i gat toksave abaot hao blong yusum sistem ia. Taem wan niu man i wantem aksesem sistem ia, hemi save askem long SPREP mo SPREP i save givim trening mo setemap wan akaon blong hemi login long hem. SPREP i stap setemap ol nasonal totel monitaring kodineta long wanwan Pasifik kantri tu, mo olgeta ia bae oli givhan long wok blong ol monita we oli stap mekem rekod. SPREP i gat plan blong givim trening long kodineta ia mo ol komuniti monita long 2024/25. i bin gat smol toktok finis wetem Daerekta blong Vanuatu Fisheries Department, toktok ia i gud mo i nid blong Fisheries Department i putumap wan long ol data ofisa blong olgeta olsem nasonal kodineta we SPREP bae i givim trening long hem. SPREP i save givim trening long ol komuniti monita tu.

#	Specie	Date	Date	S	I	No	entry	total eggs
		Born	Hatch	Born	Bug	gut		
1	D	26/9/21	26/11/21	6/12/21	H	79	*	72
2	D	18/10/21	3/12/21	13/12/21	H	*	*	*
3	D	10/10/21	10/12/21	10/12/21	H	12	*	112
4	D	2/10/21	13/12/21	23/12/21	H	101		101
5	D	18/10/21	13/12/21	23/12/21	H			170
6	D	13/10/21	13/12/21	23/12/21	H	4		170
7	D	8/10/21	15/12/21	05/01/22	G	*	*	98
8	D	17/10/21	15/12/21	05/01/22	H			106
9	D	18/10/21	15/12/21	05/01/22	G	*	*	56
10	D	2/10/21	30/12/21	09/01/22	H	*	*	108
11	D	2/10/21	30/12/21	09/01/22	H			175
12	D	1/11/21	12/01/21	22/01/22	H			190
13	D	1/11/21	12/01/21	22/01/22	H			No Guel evry w



Pikja 14. Sistem blong elektronik rekod we oli traem long Bamboo Bay. Christopher Bartlett i tekem pikja ia.

5.10 Loa Blong Totel

Loa ia Fisheries Regulation Order No. 28 (2009) i protektem ol totel, tru long wan proses blong manejem ol totel. Hemi kontrolem namba blong totel we ol pipol oli save kakae mo i mekem i tabu blong kilim trifala kaen totel (grin, hoksbil mo letabak). Long English, loa ia i talem olsem:

Fisheries Regulation Order Number 28 of 2009 (Cap 59) Olgeta Totel

(1) Wan man i no mas:

- (a) karem, kilim, gat wetem hem, ekspotem, salem o pem eni o evri totel blong olgeta spisis ia:
 - (i) Dermochelys coriacea, oli save long hem olsem Leatherback totel, mo yu save luk long Skejuol 26;
 - (ii) Eretmochelys imbricata, oli save long hem olsem Hawksbill totel, mo yu save luk long Skejuol 26;
 - (iii) Chelonia mydas, oli save long hem olsem Green totel, mo yu save luk long Skejuol 26; o
- (b) karem, gat wetem hem, salem, pem o ekspotem eni sel blong olgeta spisis blong totel we oli tokbaot long paragraf (a); o
- (c) kam insaed o distebem long eni wei wan nest blong totel o eni totel we i stap priperem nest o redi blong putum olgeta eg; o
- (f) karem, gat wetem hem, kakae, ekpotem, salem o pem eni eg blong totel; o
- (g) mekem nogud, holem taet, kilim, kakae, salem, pem, ekspotem o destroem eni spisis blong totel (bebe totel, yang totel o adult totel) tru long yus blong eni stik o samting blong spolem olgeta totel wetem; o
- (h) gat wetem hem eni totel blong solwota we oli kasem hem long eni we imo holem taet hem.

(2) Nomata long olgeta provisen we oli putum anta pia long sabklos (1), wan man bae save raet i go long Daerekta blong aplae from eksepsen long evri o eni long olgeta provisen anta pia anda long sabklos (1) long pepos blong karemaot olgeta kastom praktis, edukesen mo/o risej.

Loa ia i putum se i tabu blong kilim ded wan long olgeta tri kaen totel ia (grin totel, hoksbil totel o letabak totel) mo i tabu blong yusum eni samting olsem masket blong solwota o huk blong holem totel. Anda long loa ia, ol pipol oli save kilim totel folem kastom blong olgeta, o tekem ol totel from edukesen o risej, be oli mas aplae from permit fastaem. Enfosmen blong loa ia i no isi tumas from ino gat inaf resos blong visitim kominiti blong mekem wok ia. Vanuatu Fisheries Dipatmen i stap apoentem ol fisheries ofisa long ol komuniti blong helpem enfosmen blong ol loa blong totel be emi emi no naft yet blong helpem enfosment long fulap komuniti. Plan ia i rekomendem se oli sud trenem mo apoentem wan ofisa blong Bamboo Bay.

Long loa ia Environmental Protection and Conservation Act (CAP 283), i gat sam jenerol rul tu blong protektem envaeromen wetem ol laef samting long graon mo solwota. Anda long loa ia i gat proses blong setemap ol komuniti konsevesen eria mo oli mas mekem ol assesmen fastaem we oli kolem 'environmental impact assessment' o EIA. Loa ia i listim totel olsem wan impotent animal blong protektem insaed long konsevesen mo tabu eria manejem plan. Seksen 45(1) (f) blong loa ia i givim paoa long minista blong mekem rul blong lukaot long wanwan kaen anamol we i stap long nid blogn protektem, mo seksen 2 (b) i givim paoa blong manejem ol animal long solwora we pipol i havestem blong usum.

6. OI Woman Mo OI Pipol Wetem Spesel Nid

Bamboo Bay Komuniti Totel Manejmen Plan i luksave se ol woman tu oli gat pat long wok blong lukaot totel mo ol nara samting long solwota. Long taem blong konsaltesen long plan ia long kominiti, ol woman wetem ol gel tu oli bin tekpat long hem. Komuniti i gat bigfala eksipriens long wok blong lukaot totel long 1990s i kam, mo plan ia i tekem insaed ol gudfala save blong komuniti. Komuniti i mekem plan ia wetem tingting se evri pipol i mas karem semak benefit long hem. Hemia i inkludum ol woman, ol gel, mo olgeta we oli disebol. Yumi enkarajem ol woman mo ol gel blong oli tekpat long wok ia blong meksua se evri pipol long komuniti bae oli benefit long hem.



Noel mo Philip tufala entarem ol namba blong totel.
Foto hemi blong Christopher Bartlett

7. OI Jalens Mo Problem Long Wok Blong Lukaot Totel

Oi totel oli stap fesem fulap problem mo jalens long laef mo work blong protektem mo lukaotem ol nes mo pikinini blong totel. Oi jalens long saed blong envaeromen tru long Klaemet jenj emi afektem bigwan laef blong ol totel. Be bigfala problem emi fasen we ol pipol i mekem long totel olsem kakae mit mo eg blong totel, spolem nes blong totel mo ol anamol i spolem nes blong totel. Wanfala buk we oli kolem 'Vanuatu Sea Turtle Management Review Report' (Hickey et al. 2023) we projek blong BIEM emi producum emi kivim bigfala toksave long ol wok blong manekem mo konsevem totel long Vanuatu. Tru long ol storiam wetem komuniti long 2022 mo long 2020 i faenemaot ol problem we i stap afektem work blong totel long Bamboo Bay. List blong ol problem ia i stap long Tebol 10 mo Fika 15 i soem samfala pikja blong ol problem ia.

Tebol 10: OI problem mo jalens blong lukaotem totel long Bamboo Bay

	Problem	Toksave blong hem
1	Eria i bigwan mo i had blong kasem evri ples	Hemi had blong ol monita oli wokbaot blong visitim olgeta eleven ples we totel i save mekem nes long hem long dei mo long naet.
2	Monitaring Komiti i no wok	I gat wan Totel Monitaring Komiti long Bamboo Bay be hemi no aktif mo ol olfala nomo (Noel Kaibaba, Phillippe Vanua wetem Hubert Komay) oli stap mekem wok.
3	Oi pipol oli no interes tumas	From se ol monita oli wok olsem volontia nomo, ol pipol oli no interes tumas long wok ia, oli interes mo long ol komiti we wok blong olgeta i save winim mani olsem kakao, laefstok mo agrikalja.
4	I nidim aweanes mo edukesen long Dickson Reef mo Tisvel	Komuniti blong Dickson Reef oli interes blong joenem monitaring program. Oli nidim aweanes mo trening blong leftemap save blong olgeta.
5	I no gat inaf ples blong salem ol prodak we ol pipol oli mekem	Komuniti i mas gat janis blong winim mani blong oli save tekpat long wok blong lukaot long ol totel. Oli save winim mani long ol samting olsem kakao, kopra, buluk, kava, fis mo timba, be i had from naoia i no gat rod blong trak, transpot hemi bot nomo, be bot i sas.
6	Komuniti i no save helti tumas from oli no gat gudfala toelet	Oi pipol long komuniti oli mas gat klin wota from sapos oli sik bae oli nomo save tekpat long wok blong monitarem ol totel. i gat wota saplae we oli mekem finis be i nogat gudfala toelet yet, i gat ol lokol haos nomo we saeklon i save spolem.
7	Oi anamol we man i fidim oli save kakae eg blong totel	Kaen anamol we i kakae plante eg blong totel long Bamboo Bay hemi ol dog blong ol man. Ol dog oli save smelem blad we i kamaot taem mama totel i putum eg mo oli save smelem ol eg we i sting taem ol smolsmol totel oli stap kamkamaot long nes, afta oli kam from nes.
8	Oi anamol oli save kakae ol smolsmol totel taem oli stap godaon long solwota	Taem ol smolsmol totel oli godaon long solwota mo oli stap yet long salo ples, ol nara anamol olsem pijin blong solwota, sak mo krab oli save kakae olgeta.
9	Oi man oli save stilim eg blong totel	Oi man oli no stap stilim eg blong totel oltaem, be lukaot bae i hapen long Dickson Reef mo Tisvel from olgeta oli no tekpat long program blong lukaot long ol totel yet. i had from i no gat aweanes o proses blong manejem ol totel mo meksua se ol man ol folet loa.
10	Oli man oli save kilim ol mama totel	Naoia i nogat fulap man oli stap kilim ol bigfala totel mo speseli ol mama totel we oli stap mekem nes, be lukaot bae i save hapen from i no gat gudfala monitaring long ol ples we i stap farawe long not long Tisvel mo long ol ples long is blong Bamboo Bay. Loa i stap be i nogat wei blong meksua se ol man oli folet.
11	Solwota i save spolem nes o wota i save go insaed	Samfala nes blong totel i stap long ol ples we solwota i save kavaremap o i save karemaot sanbij long hem long taem blong saeklon, mekem se eg i save damej o i save lus. Mo tu, riva mo strim we i kam daon long solwota i save ron bigwan mo digim sanbis mo jenjem rod blong hem long Beach G, J mo K, mo spolem ol nes.

	Problem	Toksave blong hem
12	Oi anamol we man i fidim i save purumbut long nes	Oi buluk oli stap wokbaot olbaot long samfala ples we totel i mekem nes long hem (Beach G mo D). Oli stap spolem ol nes from ol save purumbut long nes mo oli save distebem mama totel hemi stap putum eg.
13	Klaemet jenj i save mekem tempreja blong sanbij i jenj	Taem tempreja blong sanbij we eg i stap long hem i jenj, i save afektem ol eg. Taem ples i hot tumas i save kilim eg i ded o i save afektem namba blong boe totel wetem namba blong gel totel we bae olii kamaot long eg.
14	Oi man oli kliarem ples klosap long solwota	Sado blong ol tri we oli stap long saed long solwota i gud from i mekem san i no save mekem ol nes i hot tumas o damejem ol eg. Taem ol man oli kliarem ples o oli katem tumas wud i save mekem san i hotem ol nes mo spolem ol eg.
15	Oi samting we i stap long sanbij i save blokem ples	Ston o wud we i foldaon i save blokem rod blong ol mama totel mo ol smolsmol totel we oli wokbaot long sanbij. Long 2022 i bin gat wan mama totel we ol ston i blokem hem afta hem i ded.
16	Laet i save distebem ol totel long naet	Taem we i gat laet long naet, i save mekem ol mama totel we oli stap kam so mo ol smolsmol totel we oli stap godaon long solwota oli konfius mo oli nomo luksave rod blong olgeta.
17	Plastik i mekem doti	Oi bigfala totel wetem ol smolsmol totel oli save fasfas long plastik mo ol nara doti mo oli save kakae doti long solwota, mekem oli gat kil o oli ded.
18	Nogat wei blong mekem ol man oli folem loa	Long eria blong Bamboo Bay mo Dickson Reef i no gat eni wei blong mekem ol man oli folem loa we i stap blong protektem ol totel, mo taem man i brekem loa i nogat man i luksave. Komuniti i no gat paoa.



Pikja 15. Nes wetem ol smolsmol totel we dog mo buluk i spolem mo krab i kakae; Christopher Bartlett i tekem ol foto ia.

8.OI Aksen Blong Tekem Blong Adresem ol Jalens Mo ol Problem ia

Long miting wetem ol lida blong komuniti wetem ol totel monita long Bamboo Bay, ol kamap wetem ol praeoriti wok we i stap long Tebol 11 – 17, blong ajivim ol objektif blong Plan olsem:

- 1.** Protektem mo lukaotgud ol totel risos blong tedei wetem ol fiuja jeneresen.
- 2.** Lukaot long ol nes blong totel mo kipim olgeta i sef.
- 3.** Leftemap save mo skil blong ol Totel Monita mo ol nara pipol long komuniti blong oli save lukaot gud long ol risos blong olgeta
- 4.** Helpem wok blong mekem stadi mo kasem mo save long saed blong ol totel long Bambo Bay mo long Vanuatu, long Pasifik mo raon long wol.
- 5.** Mekem kastom fasin blong manejem ol risos long graon mo solwota i kam mo strong.
- 6.** Mekem rod blong wok tugeta mo serem save wetem ol totel risos jampion long ol nara viley mo ol nara aelan.
- 7.** Mekem ol pipol blong Bamboo Bay i benefit long wok blong totel, naoia mo long fiuja, speseli tru long ol turis.

Tebol 11. Wok blong monitarem ol totel long Bamboo Bay

	Aktiviti mo problem	Aksen blong stretem	OI tul we i nid	Hu i responsabol	Deit we i komplit
1	OI zone long beach i no klia	Mekem map blong ol wanwan beach eria mo shoem klia ol wanwan zon wetem GPS poen mo putum long saen bod olsem eksampol “B3”, blong mekem i klia ol stret nem mo namba blong wanwan beach	Tablet wetem kamera we i gat GPS OI smol saen bod (marin plaewud o plastic)	OI lokol monita + OI projek	
2	Wok blong ol monita i no semak oltaem – oli putum maka lo nes mo monitarem long ol difdifren fasin	I gud blong folem Totel Monitaring Gaedlaen blong SPREP	Kopi blong SPREP monitoring Gaedlaen	SPREP / WSB	
		Mekem wan softala video blong tijim wok blong monitarem totel long Bamboo Bay	OI samting blong filmem video	WSB	
		Givim trening oltaem long ol monita long ol gudfala fasin blong monitarem ol nes we i stap long gaedlaen blong SPREP	Pen mo pepa blong raet long hem, ol posta, ol video, mo ol pepa	WSB, VFD, DEPC	
3	OI monita oli no gat stret tul blong mekem wok blong olgeta	Pem ol samting we ol monita oli nidim blong mekem wok blong monitarem ol nes Putum ol nid a long ol projek i pem tru long ol dipatmen blong gavman	Tablet we i gat GPS, teplaen, hed toj, pistol toj, wotapruf paos, renkot, hae-vis kot, tag, tul blong fasem tag long totel, notbuk, Masta Rekod Buk	OI projek WSB	

	Aktiviti mo problem	Aksen blong stretem	Ol tul we i nid	Hu i responsabol	Deit we i komplit
4	Ol maka we oli putum long nes i no naf, ol bambu maka i save lus o i save damej	Impruvum fasin blong putum maka long nes, meksua se evri nes i gat maka we hemi bambu o wan nara samting we bae i las long taem	Ol maka blong nes (bambu o saen plastik)	Ol projek Ol komuniti totel monita	
5	Ol monita oli wokbaot let long naet mo long eli moning mo oli no gat selta	Bildim wan Total Waj Haos/Senta we i gat satelaet intanet, sola mo ol samting we ol monita mo ol visita bae oli nidim taem oli mekem longfala wokbaot mo oli wantem slip long haos ia	Ol samting blong mekem haos, sola sistem, 3-Link satelaet intanet, ol bed, matres, moskito net, toelet, ol tul blong kijin, etc	Ol projek VFD Ol komuniti totel monita	
6	Ol anamol mo ol man oli stap digim mo kakae eg long ol ples we i stap farawe long vilej, i no gat man i wajem ples oltaem	Kavarem ol nes wetem bamboo net mo plastic net blong stopem animal, mekem ol aweanes long pipol, continue monitoring wok long ol ples farawe, expandem wok blong monitoring iko long ol nara kominiti	Bamboo net mo plastic net, glass blong lukluk long we,	Ol projek DEPC, VFD	
7	Jenis long tempereja blong sanbis emi save afektem kuwaliti blong eg	Mekem stadi long tempreja blong andastanem gud ol jenis ia mo hao emi afektem namba blong ol boe mo gel totel we oli bon	30x Temperature Logger (masin blong monitarem tempreja) mo training blong usum machine ia	Ol projek VFD	
8	Namba blong ol monita i no naf blong oli wokbaot long ol ples we i stap farawe	Givim wok long 2 long ol monita we oli stap finis blong oli wok long Septemba kasem Februari, mo 1 monita long Jun, Julae, Ogis, Maj mo Eprel	Nogat	Ol projek VFD o DEPC WSB	
		Aplae long ol project sapot from ol samting we i nid tumas olsem smol alawens blong pem ol monita	Technical pipol blong givim sapot	VFD, WSB, DEPC, SPREP, Eria Kaonsel	
9	Samfala eria blong nes emi stap farawe tumas blong wokbaot mo i had blong kasem taem solwota i kam so (E,F)	Yusum totel monitaring haos. Askem help long wan bot blo usum long kasem ol ples we i stap farawe	Pei blong bot wetem bensin	Ol komuniti totel monita wetem ol projek	
10	Intanet netwok i nogud tumas mo i no gat paoa blong kominikesen mo sedem ol imfomesen	Aplae long ol nara project blong buildem Totel Monitoring Senta long wan ples we i gat gudfala netwok mo i gat solar paoa blong ranem Intanet servis	Material blogn hos, internet setup, solar pawa	VFD, WSB, DEPC, SPREP, Eria Kaonsel	
11	Tagem ol totel wetem satelaet tag	Tagem ol totel long satelaet tag blong save mo long ol ples we ol totel blong Bamboo Bay oli stap go blong lukaotem kakae mo mekem pikinini	Ol satelaet tag mo ol nara tul blong hem	Ol projek, SPREP, WSB, Fisheries Dept.	

Tebol 12. Wok blong relokem ol nes blong totel long Bamboo Bay

	Problem	Wok blong stretem problem	OI tul we i nid	Hu i responsabol	Deit we i komplit
1	Ol nes we i stap long denga blong solwota i wasem aot	Muvumaot ol nes ia speseli long Beach C folem pat 2 blong ol gaedlaen we i stap long en blong buk ia	Fanis wetem lokol materiel o plastic materiel, savel mo plastik baket	Komuniti	
2	Ston i save blokem ples taem mama totel i kam blo putum eg mo ol smolsmol totel i faenem i had blong wokbaot i godaon long solwota	Muvumaot ol ston mo wud, mo folem pat 2 blong ol gaedlaen we i stap long en blong buk ia	Man pawa, Savel	Komuniti OI projek	
3	Ol buluk oli stap purumbut long ol nes mo oli save damejem	Mekem fanis long ol mein nes eria olsem long Beach B mo C blong blokem buluk i no go long nesting beach	Roll waea blong buluk (1 km), stepol. jenso blong katem pos	Komuniti OI projek	
4	I no gat inaf aweanes mo trening long hao blong muvum ol nes	Mekem wan softala muvi blong tijim hao blong muvum ol nes	Samting blong filmem videoi, man blong mekem video, advaes blong ol ekspet long hao blong muvum nes	OI projek VFD SPREP	
5	Ol monita oli no gat ol tul blong wok	Pem ol stret tul blong wok blong muvum nes	Ol savel, ol baket, saen bod blong putum long nes	OI projek WSB	
6	Ol monita oli no save gud hao blong holem ol eg taem oli stap muvum nes	Givim trening long ol monita blong tijim gud fasin blong muvum nes, mo speseli ha oblong handelem ol eg	Man o woman blong mekem trening wetem ol materiol blong hem	OI projek WSB VFD	
7	Mekem fanis blong putum ol nes insaed long wan niufala ples or putum nes aousaed nomo long niufala ples	Mekem wan fenis blong ol nes bakegen long ol strong materiol olsem plastik fenis klosap long Totel Haos blong seven ol nes i go long hem	Plastik net, polikot o galvanae fenis we Plastic material we inaf blong blokem ol animaol i no gi insaed, stepol nail, timba post	Komuniti wetem ol projek	

Tebol 13. Wok blong kipim pikinini totel i sef taem ol go long solwota

	Problem	Wok blong stretem problem	Ol tul we i nid	Hu i responsabol	Deit we i komplit
1	Ol anamol, speseli ol dog oli digim mo kakae eg	Putum ol kej ova long nes blong bokem ol animol i no digimnes olsem long Beach D mo E	Iron or plastic kej we i no hevi tumas, 1.5 m × 15 m	Ol projek Komuniti	
2	Ol man blong ol nara komuniti oli stap digim mo kakae eg	Mekem aweanes wetem ol nara komuniti long loa we i protektem ol totel mo putum wan Fisheries Authorised Officer long eria ia	Pen mo pepa blong raet long hem, ol posta, ol video, ol pepa we man i printim	Polis, VFD, DEPC, Eria Kaonsel, WSB	
3	Ol sak, fis mo pijin oli kakae pikinini totel taem oli kasem solwota	Letem ol smolsmol totel i wokbaot long sanbij fastaem blong mekem oli save ples, afta go putum olgeta long dip ples, o swim wetem ol smolsmol totel taem oli stap krosem rif	Pei blong bot, mo daeva glas wetem winpaep	Ol lokol monita	
4	I no gat saen bod long ol nesting beaches blong mekem man i save	Putum saed bod long everi 200 mita folem evri eria blong totel mo loa blong protektem ol totel	Ol saen bod we oli printim (marin plaewud o plastik, saes olsem A4 pepa we i stanap), nil, timba o aean pos	Ol projek Komuniti VFD	
5	Pipol long komuniti oli no respectrem ol loa blong totel	VFD bae i apointem wan fiseri ofisa blong Bamboo Bay blong wok wetem komuniti blong meksua se ol man oli folem loa blong protektem ol totel	Nogat	VFD, Polis	
6	Ol Jioj i no tekpat long wok blong totel mo ol nara samting long solwota	Ol lida blong jioj oli mas putum wok blong totel long program blong olgeta evri yia	Nogat	Jif wetem ol lida blong jioj long Bamboo Bay	
7	Ol wael dog mo ol dog blong ol man oli save spolem ol nes mo ol smolsmol totel	Oganaesem ol man blong go ronem mo kilim ol wael dog mo limitim namba blogn dog long wanwan haoshaos	Masket wetem bolet	Polis, Komuniti	

Tebol 14. Wok blong manejem rekod blong ol totel long Bamboo Bay

	Aktiviti mo problem	Aksen blong stretem problem	Ol tul we i nid	Hu i responsabol	Deit we i komplit
1	Ol monita oli raetem rekod long pepa oltaem be pepa i stap damej isi nomo long ren mo i lus long viley o taem oli sendem i go long Vila	Jenjem rekod buk mo pepa mo move i ko long elektronik rekod system olsem teknoloji blong tede we i mo isi mo i safe. Trening ol monita long niufala elektronik rekod sistem. Pat 1 blong gaedlaen we i stap long en blong buk ia i tokbaot hemia	Ol tablet wetem aplikesen blong databases, Master Data Book (bigfala buk blong ol rekod), Wotapruf rekod pepa	Ol projek	
2	Ol dipatmen blong gavman oli no gat akses long ol rekod blong ol totel we i stap long TREDS databases long SPREP	Trening blong ol ofisa blong kavman blong manejem rekod sistem long kompiuta	Kompiuta sistem	VFD, DEPC mo SPREP	
3		Setemap TREDS dadbes weten wan nasonal fokol ejensi we bae i lukaot long ol rekod mo i wok tugeta wetem ol monita blong maneje ol rekod long bihaf blong gavman			
4	SPREP i no stap risivim gud infomesen long Vanuatu	Setemap wan gud databaseis system wetem gavman olsem (VFD o DEPC) i lukaotem, ol ofisa bae oli gat trening long hao blong usum system, jekem mo sendem correct data i go long SPREP	Kompiuta sistem	VFD, DEPC mo SPREP	
5	Ol otoriti oli risivim infomesen afta we sisen i finis, mekem se oli no save mekem eni kwik disisen folem wanem we i stap long infomesen ia	Stopem rekod long pepa be muv i go long elektronik sistem blong rekod. Bae i gat wan sistem nomo we i risivim evri rekod we monita i submitim wantaem	Kompiuta sistem, save blong hem	VFD, DEPC mo SPREP	
6	I nidim gudfala save blong manejem ol rekod blong totel	Trening blong ol moita blong tekem rekod, jekem (long pepa mo long tablet) mo sendem rekod long nasonal focal agency	Pen mo pepa blong raet long hem wetem ol pepa mo Tablet	Ol projek, VFD, DEPC, komuniti	
		Putum ofisa blong lukaot ol rekod mo i save helpem ol monita long sisen blong ol totel	NA	Dona we i wok wetem WSB, mo VFD	
7	Introdusim elektronik rekod sistem	Usum elektronik sistem blong rekodem infomesen olsem we i save wok long tabklet. Sistem ia bae i rekodem infomesen semak olsem ol rekod pepa we i stap naoia, be ol monita bae oli save mekem rekod mo submitim wantaem. Ol patna olsem WSB, VFD, DEPC, SPREP TREDS bae oli gat akses long sistem ia ⁴	Program ia Kobo Toolbox, ol tablet, samting olsem sola blong jajem ol ting. Bae oli setemap fokol ejensi blong manejem sistem	Komuniti, VFD wetem ol projek	
		Putum sola sistem wetem satelaet intanet long Totel Monitoring Senta blong sendem ol rekod taem netwok i no wok	3 Link satelaet Intanet, 1KW sola sistem	Ol projek	

⁴ Hemi impotent tumas se Vanuatu Fisheries Department i risivim ol totel rekod from infomasen ia i save helpem olgeta blong givimaot ol toksave, rul mo advaes we i stret.

Tebol 15. Wok blong serem infomesen wetem ol nara komuniti long Bamboo Bay mo aotsaed

	Problem	Wok blong stretem problem	Oi tul we i nid	Hu i responsabol	Deit we i komplit
1	Komuniti i stap sendem ol rekod i go long Vila be oli no harem or karem wan ripot i kambak mo eni nara tingtn blong improve	Mekem 4+ miting wetem komuniti evri yia blong tokbaot hamas totel oli mekem nes / karem tag / kamaot long nes, mo ol nara topik olsem hao blong manejem doti long ples mo hao blong lukaot long ol animal mo ol risos long graon mo solwota	Projekta, jenereta, skrin, laptop wetem ol program, ol posta, ol pepa we oli printim, ol muvi	VFD, DEPC, Wan Smolbag, SPREP	
		Lukluk tru long ol rekod evri yia mo mekem stadi long ol samting olsem hamas totel i mekem nes, wanem kaen totel kam so mo weaples oli kam so long hem, hamas totel i karem tag mo hamas long olgeta ia oli kambak bakegen, hamas smolsmol totel oli laef mo hamas oli lus, mo tempreja blong sanbij. Raetem ditel ripot wetem softala ripot blong givimaot long ol jif mo komuniti blong Bamboo Bay	Kompiuta, gudfala infomesen	DEPC, VFD, WSB, SPREP	
2	I no gat tumas janis blong gat miting o toktok wetem ol nara monita mo ol ekspet	Tekpat long WSB Vanua Tai Risos Monita miting we i tekples evri yia, mo go long ol miting mo trening from manejmen blong ol totel mo envaeromen we gavman o ol nara patna i hostem	Mani blong travel	WSB	
3	I no gat rod blong ol monita long ol nara viley oli save toktok o wok tugeta	Tekpat long ol miting mo trening blong NW/SW Malekula Network, Malekula Protektem Risos Coalition mo ol nara grup, mo hostem sam long ol miting ia	Mani blong travel	Eria Kaonsel, Malekula Protektem Risos Coalition, ol NGO	
4	Fulap pipol long ol nara pat blong Vanuatu mo ovasi oli no save wok blong lukaotem totel long Bamboo Bay	Statem wan eksjenj program wetem ol monita blong Wiawi. Mekem visit i go long ol nara ples mo ol nara wok blong lukaot long graon mo solwota i stap tekples long hem, mo hostem ol jampion blong ol nara aelan i kam long Bamboo Bay	Mani blong travel	Ol monita long Wiawi mo Bamboo Bay	
		Hostem wan Lafet blong Totel ('Bamboo Bay Turtle Festival') evri yia long Bamboo Bay. Lafet ia bae i tekem 2 dei mo bae i gat ol aktiviti olsem: wokbaot wetem ol monita long ples we totel i mekem nes long hem, sandroing, kastom stori, handikraf, miusik mo ol kompetisen. Enkarajem ol visita blong kam long ol nara aelan mo ol nara kantri	Kakae, ples blong ol visita i slip long hem, ples blong mekem lafet, ol samting blong travel	Ol lokol monita, Department of Tourism, Vanuatu Tourism Office, Malampa Provin, Eria Kaonsel, VFD, DEPC, Wan Smolbag, SPREP	
		Mekem ol singsing blong totel mo envaeromen wetem ol lokol stringban mo ol nara grup	Mani blong mekem rekoding long studio	Wan Smolbag, VFD, DEPC	

5	Ol yangfala kel mo ol woman oli no stap tekpat gud long wok blong lukaot long totel	Statem wan Yangfala Totel Monita program blong givim trening mo enkarajem ol yangfala man mo woman blong tekpat long wok blong lukaotem solwota mo ol totel. Lukluk long pat 1 blong ol gaedlaen we i stap long en blong buk ia	Nogat	Wan Smolbag, VFD, DEPC	
	Hostem 2 yut kam evri yia. Long taem ia ol yangfala bae oli kam tugeta blong lanem wok blong lukaot long ol totel, long wan fasin we bae ol yangfala oli enjoem mo bae oli interes long hem. Ol olfala mo ol monita bae oli stap olsem tija	Projekta, jenereta, skrin, laptop wetem ol program, ol posta, ol pepa we oli printim, ol muvi	Ol lokol monita, VFD, DEPC, Wan Smolbag, SPREP, Eria Kaonsel, Department of Education		
	Meksua se i gat ol woman totel monita, from samfala taem ol woman oli no gat pat long ol disisen we komuniti i tekem long saed blong totel mo ol nara risos long solwota, ol woman oli impoten from olgeta nao oli save tijim long ol pikinini hao blong lukaot gud long envaeromen	Nogat	Ol jif mo ol nara lida long vilej		

Tebol 16. Ekonomik aktiviti tru long konsevesen mo sustenbol resos manejmen

	Problem / tingting	Wok blong stretem problem	Ol tul we i nid	Hu i responsabol	Deit we i komplit
1	Komuniti i no gat inaf mani blong impruvum wok blong lukaot long ol totel	Statem aktiviti blong totel turism olsem ‘Bamboo Bay nature tour’. Bae ol turis oli wokbaot long bus, lukluk ol pijin, lukluk ples we totel i mekem nes hem mo swim wetem glas long solwota. Lukluk long pat 1 blong ol gaedaen we i stap long en blong buk ia	Ol tul blong mekem	MALFFB, Malampa provins, Vanuatu Skills Partnership, Eria Kaonsel	
		Kamap wetem ol fi we ol studen mo ol scientis i pem blo kam mekem risej long ol totel long Bamboo Bay	Ol tul blong mekem	Ol projek, Komuniti, VFD, DEPC	
		Karem aot trening long hao blong mekem bisnis wetem ol turis long bus mo long solwota, ol standed mo hao blong lukaot gud long ol visita	Projekta, jenereta, skrin, laptop wetem ol program, ol posta, ol pepa we oli printim, ol muvi	Department of Tourism, Malampa Tourism, Vanuatu Skills Partnership	
		Oganaesem wan “Turtle Tourism Product” we ol turis oli save kam from5. Ol turis oli save slip wetem ol famle long wanwan haos	Ol tul blong advataesem, websaet long Intanet, Facebook	Department of Tourism, Letokas Komuniti Asosiesen	
		Setemap wan pej long Facebook (Bamboo Bay Tabu) mo stap pos long hem oltaem, setemap wan email (BambooBayconservation@gmail.com), setemap wan smol websaet blong projek	Kompiuta wetem Intanet	Ol projek	
2	Divelopem bisnis blong prosesem lokol kakae blong salem	Lukaotem ol nara rod blong winim mani blong sapotem wok blong lukaot totel, olsem: draemap kakae long san, mekem oel long kokonas, mekem jips long kokonas, draemap nangae, mekem kaving mo handikraf.	Ol tul blong mekem	Ministry of Agriculture, Malampa provins, Vanuatu Skills Partnership, Eria Kaonsel	
		Salem kakae we i tan long ol visita	Ol tul blong mekem	Ol projek, Komuniti, VFD, DEPC	
3	I no gat gudfala haos we ol visita oli save slip long hem	Setemap wan Totel Monitaring Haos mo putum fi we wan visita bae i pem o fi we wan grup bae i pem taem oli slip wan naet long hem, mo setemap wan komiti blong manejem projek ia	Lokol timba we i fri, pei blong somel blong katem timba, ol lokol wokman, pei blong fiul	Ol projek, Komuniti, VFD, DEPC	
		Meksua se Totel Haos i mitim standed blong ol turis wetem ol simpol samting we ol turis bae oli nidim taem oli kam slip. i mas gat tourism permit blong ranem haus ia	Ol bed, matres, moskito net, toelet, ol tul blong kijin, ol nara kaen samting we ol turis bae oli nidim	Komuniti Asosiesen, VFD, DEPC	
		Enkarajem ol pipol blong mekem ol res haos blong ol turis we i mitim standed	Ol lokol materiol, graon	Komuniti Asosiesen	

5 Yumi save se taem ol turis i kam i save gat sam nogud saed blong bisnis ia we lukaot bae i afektem komuniti, spolem ples o distebem ol totel. i nid blong tekem kea mo folem advaes wetem ol standed we i stap, blong meksua se evri tingting i stret nomo.

Tebol 17. Wok blong manejem program long Bamboo Bay

	Problem / tingting	Wok blong stretem problem	Ol tul we i nid	Hu i risponsabol	Deit we i komplit
1	Komuniti i no gat gudfala abiliti mo save blong ranem ol projek	Mekem wok blong ol jif long Bamboo Bay komuniti i kam mo strong, mo mekem i gat gudfala toktok oltaem wetem ol monita mo ol jif	Laptop, fon, ol pen mo pepa blong raet long hem	Ol jif blong Bamboo Bay, Vanuatu Climate Action Network, WSB, Vanuatu Kaljoral Senta	
		Mekem trening long ol lida long Bamboo Bay long wok blong ol kominiti lida, manejem ol projek, rekodem mani, ranem miting, raetem ripot, aplae from projek, monitarem mo mekem asesmen blong projek.	Ol samting blong mekem trening	Oxfam, Vanuatu Climate Action Network, WSB, Eria Kaonsel	
		Askem wan volentia blong kam sapotem wok blong envaeromen, mo satenebol inkam activiti	Haos we volontia i save slip long hem	JICA, Volunteer Service Overseas, Australian Volunteers, Peace Corps	
2	I no gat gudfala abiliti blong manejem ol samting	Leftemap wok blong Letokas Komuniti Asosiesen blong raetem mo sabmitim anual ripot, pem 5000 vatu fi evri yia, mo folem rul blong wan asosiesen we i rejista	Laptop, fon, pen mo pepa blong raet long hem	Komuniti Asosiesen, Vanuatu Climate Action Network, Wan Smolbag	
		Ranem trening blong Leitokas Komuniti Asosiesen long raning blo asosiesen blong manejem ol projek, rekodem mani, ranem miting, raetem ripot, aplae from projek, monitarem mo mekem asesmen blong projek.	Ol samting blong mekem trening	Oxfam, Vanuatu Climate Action Network, Wan Smolbag, Eria Kaonsel	
		Holem miting blong Eksekutif evri manis olsem rul blong Asosiesen i talem	Nogat	Leitokas Komuniti Asosiesen	
		Stap aplae long ol dona from ol samting we i nid tumas olsem mani blong givim alawens long ol monita, wan bot we oli save yusum blong kasem ol ples we i stap farawe, mo ol developmen program long komuniti	Nogat	Leitokas Komuniti Asosiesen	



Grin totel. Foto hemi blong Freepik

9. Monitaring Gaedlaen

Long section ia i gat ol Gaedlaen we i talemaot mo olgeta step we ol monita oli mas folem taem oli stap karem aot ol wok blong olgeta long tufala main wok ia;

- (a) Hao blong tagem mo rekodem mama totel we i stap layem eg (Pat 1)
- (b) Hao blong reloketem wan nes mo ol eg long wan nes we i stap long denja i go long wan sef ples (Pat 2)

Pat I.

Gaedlaen Blong Hao Blong Tagem Mo Rekodem Mama Totel Taem We i Stap Layem Eg

Step 1. Ol monita oli mas gat ol tool mo material ia oltaem blong mekem wok:

- Bag blong karem ol tul
- Tag Apliketa: spesel tool blong tagem totel, we i gat handel blong hem mekem se i no nid blong prestem strong tumas blong fitim tag
- Metal Tag: ol iron tag we i gat namba long hem wetem nem mo adres blong oganaesesen we i lukaotem wok ia we emi SPREP
- Hed toj laet – laet ia we ol monita i putum long he demi gud from hand i fri blong mekem wok
- Pistol toj laet – blong laetem ples nomo afta we mama totel i layem eg finis
- Teplaen – wotapruf measuring tape olsem 3 mita tape
- Tablet o fon – blong tekem pikja, makem GPS lokesen, rekodem infomesen, teken pikja mo komunikesen
- Wotapruf paos blong fulumap fon o tablet long hem
- VHF/UHF Redio – blong toktok wetem ol nara monita
- Renkot blogin werem long taem blong rein
- Ol kala vest - blong ol monita i werem taem oli stap mekem wok blogin olgeta
- Klas blong lukluk (binoculars) blong helpem lukaot long ol activity long ol bij we i stap farawe long deitime



Ol tul blong ol totel monita



Step 2. Trening blong ol monita

- Ol monita i mas karem gudfala trening blong handelem ol mama totel from hemi no sef tumas taem oli stap putum eg, eni samting we i distebem mama totel bifo emi dikim nes mo layem eg bae i save mekem hemi nomo wantem mekem nes mo i ko bak long solwota
- Monita i mas kat trening long ha oblong tanem wan totel blong checkem wan samting, no mas tanem wan totel spos i no gat trening blong mekem or taem i no gat wan monitor i stap
- Ol monitor oli mas go tru long trening long wanem oli no save mekem taem oli stao patrol long taem blong bridging sison blogn totel olsem

No mekem noes: olsem toktok antap o laf bigwan o mekem miusik;

No Mekem laet: olsem faea, yusum tojlaet we i saen tumas; mo

Holem, tajem, karem, muvum wan totel o blokem rod blong hem o distebem hem long eni nara fasin taem i stap blong mekem nes.

Step 3. Save long taem we mama totel i kam sho blong nes

- Ol mama totel oli save kam so eni taem blong mekem nes, be emi depen nao long wanwan ples wetem low mo hae taet
- Long ples we i gat rif, ol mama totel oli kam so long taem solwota i kam so
- Long ples we i no gat rif mo solwota i dip kasem so, ol mama totel oli kam so eni taem
- Jekem ol taedal kalenda blong faenemaot wanem taem bae solwota i kam so, mo statem wokbaot samples long 2 aoa bifo long fu
- Long Bamboo Bay solwota i dip kasem so mo ol totel oli save kam any taem be oli kam so oltaem long naet nomo, mekem se program blong ol monita emi stat taem san i godaon kasem long naet mo eli moning

Step 4. Lukaotem trak blong totel long sanbij

Long taem blong patrol long sanbifn bae yu save faenem trak blong totel long sanbij mo yu save taem wanem kaen totel:

- Hoksbil totel, raetsaed blong trak blong hem i difren long lefsaed, from taem emi i wokbaot, hemi stap muvum raetsaed han blong hem fastaem afta i jes muvum lefsaed han blong hem
- Grin totel, raetsaed wetem lefsaed blong trak blong hem i semak, from emi muvum tugeta han blong hem wantaem
- Letabak totel tu, raetsaed wetem lefsaed blong trak blong hem i semak be i mo bigwan bitim Hoksbil mo Grin totel



Trak blong Grin totel



Trak blong Hoksbil totel

Hao Blong Luk Save mo Trakem Totel

Mak Blong Leg

Mekem monita long morning from mak blong leg oli no lus yet. Bae mak blong leg hemi no klia taem man hemi wokbaot antap long hemi, sanbij hemi sop sop, solwota hemi kam antap, wind o weta hemi nogud. Luk luk gud ol difren mak weh stag long rod.

Oi men samting weh yu mas luk luk from hemi:

- Wanem kaen mak leg blong totel hemi mekem
- Distans long wan leg kasem nara leg
- Mak blong tufala leg behaen
- Mak blong tufala leg long fored
- Mak weh hemi showem seh hemi pulum bodi blong hem (Plastron Drag)
- Mak blong tail



Mak blong leg hemi olsem zigzag



Leg blong totel wan hemi go fored mo wan hemi kam behaen

Leg Oli Move Long Wanem Direkjen?

Hao blong yu luk saveh seh leg oli muv long wanem direkjen:

- Totel hemi pusum sanbij hemi go behaen, mo sanbij hemi mekem ol smol hill.
- Sos mak blong leg hemi go antap long nara wan, mak weh stag antap hemi showem seh totel hemi kam bak.
- Hemi sakem sanbij hemi go bak behaen taem hemi stag dig.

Mesarem Oi Mak Blong Leg

Yu stat mesarem mak blong leg long ol end weh oli fes go aotsaed. Hemia hemi leg weh stag lo fored or behaen, depen lo spesis blong totel.



Loggerhead

Distans long wan leg kasem nara leg: Hemi no ova 1 mita

- Tufala leg behaen
- Tufala leg long fored
- Plastron drag
- Tail: Nogat mak blong tail



Hawksbill

Distans long wan leg kasem nara leg: Sam ples 70-80cm

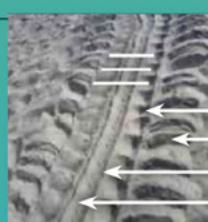
- Tufala leg behaen
- Tufala leg long fored
- Plastron drag
- Dragem tail



Olive Ridley

Distans long wan leg kasem nara leg: Sam ples 70-80cm

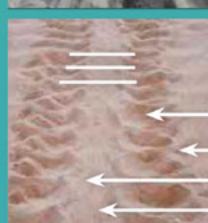
- Tufala leg behaen
- Tufala leg long fored
- Plastron drag
- Dragem tail



Green

Distans long wan leg kasem nara leg: Sam ples 94-144cm

- Tufala leg behaen
- Tufala leg long fored
- Plastron drag
- Dragem tail



Flatback

Distans long wan leg kasem nara leg: Sam ples 90-100cm

- Tufala leg behaen
- Tufala leg long fored
- Plastron drag
- Dragem tail



Leatherback

Distans long wan leg kasem nara leg: Hemi pitim 2 mita

- Tufala leg behaen
- Tufala leg long fored
- Plastron drag: Hemi no klia
- Dragem tail

Step 5. Faenem mama totel

1. Sapos yu luk wan trak blong totel long sanbij we i stap go antap long ples we gras i gru long hem, no yusum tojaet blong lukaotem totel ia, from lukaot bae hemi stap mekem nes blong hem yet, mo bae hemi lego nes ia sapos wan samting i distebem hem
2. Lisin from noes blong sanbij we totel i saksakem, hemia i minim se totel i stap digim nes blong hem nao
3. Wokbaot o krol sloslo folem noes ia o folem trak blong em
4. Samfala mama totel oli save wokbaot plante long sanbij from oli stap lukaotem wan gudfala ples blong mekem nes we i no gat tumas gras, rus blo tri, doti, ston long hem o wud i blokem
5. Weit kasem taem we mama totel i stap putum eg blong hem, bifo we yu mekem eni laet o makem eni samting! No tojem ae blong mama totel, iven sapos hemi bisi long nes. Laet we i red i gud sapos i gat
6. No mas tanem totel i silip long baksaed blong em



Mama totel i stap digim nes



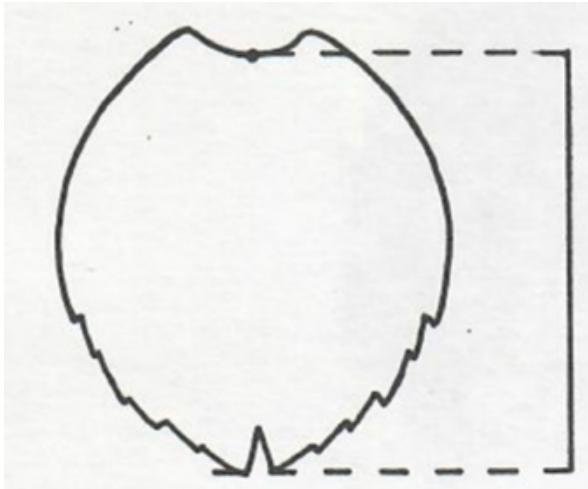
Mama totel i stap putum eg

Step 6. Rekodem infomesen blong evri mama totel we i nes:

- Deit we hemi mekem nes long hem
- Nem blo bij we nes i stap long hem (leta wetem zon)
 - Leta/namba blong eria
 - GPS poen posisen
- Wanem kaen totel
 - Hoksbil totel, eg blong em i smolsmol (4 sentimita) mo i plante lelebet (nomoli samples long 170 eg be i save kasem 250). Lefsaed wetem raetsaed blong trak blong hem i difren
 - Grin totel, eg blong em i bigwan lelebet (5 sentimita) mo i no plante olsem hoksbil totel (i no bitim 200). Lefsaed wetem raetsaed blong trak blong hem i semak
 - Letabak totel, eg blong hem i bigbigwan (6 – 6.5 sentimita), mo namba blo eg i no fulap, nomol namba i no bitim 120. Lefsaed wetem raetsaed blong trak blong hem i semak be trak i bigwan bitim tufala narawan
- Saes blong totel
 - 'Standard Carapace Length' (SCL) – longfala blong sel long baksaed, makem long wan tepmesa we yu save benem folem medel blong baksaed, statem long en blong sel long fored kasem en blong sel biaen olsem long pikja
 - Carapace Width – bigwan blong sel, makem long wan tepmesa i go kros long medel blong baksaed long ples we sel blong hem i bigwan, statem long en blong sel long lefsaed kasem en blong sel long raetsaed
- Infomesen blong tag we i stap finis long totel sapos i gat
- Infomesen blong niufala tag
 - Namba blong tag (luk step 7 long gaelaen ia)

- Infomesen long enviromen ('environmental factors')

Wanem taem we i layem eg
 Solwota i drae o i kam so
 I gat munlaet o ol sta long skae o tudak
 Tempreja – ples i hot o i kolkol
 Wanem gras o plants i stap long sanbij raon long nes
 Ne semi andanit long tri no lo klia ples
 Ol monita oli sud mekem rekod kwik afta we mama totel i finisim nes blong hem (long nekis 24 aoa).



Fasin blong mesarem longfala blong sel blong totel



Fasin blong mesarem longfala long baksaed

Step 7. Tagem totel

- Taem mama totel i layem eg finis mo i stat berem nes blong hem, hemi taem blong tagem
- I gud blong tagem taem hemi stap berem nes blong hem yet. Taem hemi stap wokbaot i gobak long solwota, i had tumas blong holem taet hem blong tagem
- Klinim tag long wan likwid we i save kilim bebet (alkol, aedin o krim blong soa)
- Waepem han blong totel long ples we tag bae i go long hem long likwid blong kilim bebet, saed antap mo saed daon
- Monita we i stap fitim tag i mas meksua se han blong hem i klin
- Tagem tufala han long foret long raetsaed mo lefsaed tugeta
- Pinnim tag long baksaed blong han klosap long ol bigbigfala skel long medel o long medel blong ol bigbigfala skel ia
- Putum sap en blong tag antap long han, mo prestem i go tru long hand i ko kamaot andanit mo benem wetem klipa

Skwisim gud klipa tul blong fasem tag wantaem

Lukaot from bae totel i muvmuv strong taem we tag i go long hem, nogud bae totel o monita i kasem kil



Metal tag wetem namba



Tag long han long forest

Step 8. Afta we mama totel i putum eg

Mesarem saes blong totel mo putum tag, recodem tag namba mo lego hem i go finisim berem nes blong hem mo gobak long solwota. No tajem hem bakegen o letem eni laet o noes i distebem hem.

Step 9. Putum maka long nes

I sud gat gudfala rekod blong evri nes.

Oi monita oli sud mekem rekod kwik afta we mama totel i finisim nes blong hem (long nekis 24 aoa).

Faenem stret ples we nes i stap long hem. Nomoli hol blong nes bae i stap long ples we mama totel bin i sidaon long hem long saed i godaon long solwota.

Putum wan maka (wan stik o pos) long sanbij, putum klosap long hol blong nes be no putum stret antap long hol blong nes.

Raetem ol infomesen ia long wan pis bod o bambu:



Priperem bambu olsem maka blong nes



Raetem deit long bambu.



Wok blong putum maka long ol nes





Hawksbill totel. Foto hemi blong USFWS – Flickr.com

Pat 2.

Gaedlaen blong muvum nes blong ol totel

Relokesen blong nes i no wan gudfala practis, be yumi mekem nomo taem we i nid blong sefem nes akensem wan denja. i gud blo lego nes i stap olsem we mama totel i putum. Olgeta poen we ol monita oli mas lukuk long em festaem befo movum wan nes.

Step 1. Assessem spos i nid blong muvumaot nes

- Jekem se nes ia i sef o no? wetem trifala questen ia:
- Faenemaot se mama totel i bin mekem nes ia long las 4 aoa nomo
- Sapos nes i ssttap long wan ples we solwota i save wasem o karem aot?
- Bae i gat wan wok i tekples klosap we i save spolem nes
- Nes i stap long wan rod o wan ples we ol man mo ol anamol oli save purumbut long hem?
- Sapos no leg ones i stap nomo

Step 2. Ples blong muvum nes i go long em

Faenem wan sef ples blogn muvum nes i go long em, plesia i mas be wan ples we mama totel bae i wantem mekem nes long hem olsem i stap long andanid long wan tree o wan shade aot long san, spo emi long fanis, fanis ia i mas stap long shade mo i no longwe tumas long solwota

Step 3. Ol tool blong reloketem nes

Plastik baket, shavel or stik mo man pawa

Step 4. Day mo taem blong reloketem nesday

Dei blong mekem nes relokesen emi mas be wan gudfala day, karemaot relokesen nomo taem san i go daon or long tudak from mama i laim eg long tidak insaad long 4 haoa we mama i laiem.

I gud oli mekem kwik, taem mama totel i putum eg blong hem finis be i no afta 4 aoa i pas.

Step 5. Who bae i karem aot relokesen ia

Ol monita we oli bin gat trening long hao blong muvum nes, olgeta nomo oli sud mekem wok ia.

Step 6: Digim aot nes

Plante taem mama totel i save putum ol eg long saed blong hol we i fesem solwota. Ol monita we oli save gud wok ia nomo oli sud digim sanbij, mo oli sud digim long han blong olgeta nomo.



Wok blong jekem nes we i nid blong muvumaot (reloketem)

Step 7. Karemait ol eg mo putum long wan baket mo kaontem

Putum sanbij blong ples we nes i bin stap long hem long botom blong kontena, blong mekem ol eg oli no save muvmuv insaed. Tekem gudfala kea blong meksua se i no gat eni eg i brok (sapos wan eg i brok, karemait eg ia wetem wota blong hem, from bae i mekem ol nara eg i sting). Blong mekem i isi blong luksave wanem saed blong eg hemi top blong hem, bae yu save raet long top blong eg long wan maka pen. Plante taem bae yu luk se top blong eg i klin mo i waet, be saedsaed blong hem mo aninit long hem i doti long sanbij.

Makem hol blong nes se i dip olsem wanem (hamas sentimita daon?).

Evri eg i mas stap long sem posisen we i bin stap long hem taem mama totel i putum, top blong hem i stap long saed antap.



Wok blong digimaot eg long nes we i damej o i no sef, mo putum gud long baket

Step 8 Muvum ol eg i ko long niu nes

Wokabaot wetem baket i go long wan new ples o wan fenis long sanbij aot long olfala nes.

Wokabaot slo mo no muvmuvum ol eg tumas. Spos you reloketem nes long daytaem no letem san i saen long ol eg. Plokem baket blong rein i no kasem eg sapos i rain.

Step 9 Digim niufala nes mo putum ol eg insaed

Digim niufala hol we i dip semak long olfala hol we mama totel i digim. Traem best blo mekem saes mo seip blong niufala hol i semak olsem olfala wan. i gud blong digim sanbij long han nomo or wan smol stik. i gud blong mekem niufala nes klosap long olfala nes, be igo antap – hemia bae i mekem i kwik mo i isi blong muvum ol eg.

Step 10 Putum eg long niu nes

Putum wanwan eg long hol semak olsem yu karem aot (no kapsaetemaot nomo long baket!). Putum ol eg we oli kamaot long botom blong olfala nes long botom blong niufala nes, mo ol eg we oli bin stap long top blong olfala nes long top blong niufala nes.

No putum eni sanbij long medel blong ol eg. Smol sanbij we i stap finis long ol eg i naf.

Berem nes bakegen mo prestem sanbij sloslo raon long en blong nes blong mekem sanbij i strong semak olsem sanbij we i bin stap long olfala nes.

Afta, hipimap sam mo sanbij antap long hem blong mekem lukluk blong hem i semak olsem nes we wan mama totel i mekem. Nes blong grin totel bae i gat 50 sentimita sanbij antap long hem. Nes blong hoksbil totel bae i gat 30 o 35 sentimita sanbij antap. i gud blong putum smol mo bakegen.



Wok blong digim niufala nes mo putum eg i go insaed long sefasin we yu tekemaot mo meksua no tantanem ol eg tumas.

Sapos taem we i pas i bitim 4 aoa (o samfala dei) mo i luk olsem solwota bae i karemaot nes ia

Step 11 Putum maka long niufala nes

Taem yu mekem niufala nes finis, raetemdaon evri infomesen ia long wan maka (wud/bambu):

- Wan kaen totel
- GPS we nes i bin stap long hem fastaem
- Eria we niufala nes (Beach/ zon)
- Deit we mama totel i putum eg long hem
- Namba blong eg
- Deit we ol smolsmol totel oli sud kamaot
- Deit blong digim - deit we ol smolsmol totel oli sud kamaot long hem + 10 dei (blong faenemaot hamas long ol smolsmol totel oli kamaot long nes)



Maka blong nes we oli muvum

Step 12. Lego ol smolsmol totel (hatchling) taem oli kamaot long eg

Oi ego oli hatch long taem we eg i redi blong brok mo pikinini totel i kamaot. Taem blong hatch emi stap long daytime or long night mo emia emi happen natural nomo. Oi monita oli save help blong digim out ol pikininin totel mo putum olgeta long sandbij blong oli go long solwota blong reducum eni damage or predation. Stap wetem ol pikinini totel mo kasem taem oli krosem rif kasem dip ples, mo traem blong mekem ol pijin, fis mo sak i no save kakae olgeta.

Step 13. Digimaot nes long deit blong digim mo tekem rekod.

Monita we hemi bin muvum nes fastaem bae i stap long taem we hemi taem blong digimaot blong rekotem hamas eg i gud, hamas i nogud. Kaontem namba blong ol pikinini totel we oli aot long nes ('Successfully escaped', SE) + olgeta we oli ded long nes ('Dead in nest', DN) mo namba blong eg we i no brok ('Unhatched eggs', UH) mo Wokemaot hamas i laef o 'survival rate' = SE / (DN + UH)



Wok blong digimaot nes we ol smolsmol totel i kamaot long hem finis blong faenemaot hamas i laef

BEACH K
Zones 1 - 45

BEACH J
Zones 1 - 18

BEACH I
Zones 1 - 21

BEACH H
Zones 1 - 5

BEACH G
Zones 1 - 32

BEACH F
Zones 1 - 3

BEACH E
Zones 1 - 12

BEACH D
Zones 1 - 10

BEACH C
Zones 1 - 2

BEACH B
Zones 1 - 2

BEACH A
Zones 1 - 2

BAMBOO BAY

TOTEL KONSEVESEN PROGRAM - MALEKULA

LUKAOTEM GUD OL TOTEL BLONG YUMI "DALEREKGENE"

Alfa we ol bebe totel oli kamaot
lo shel ol iron i kolo lo solwota

Oli totel oli sia swim swim
olibact blo 6 or 7 ya osem

Alfa we hemi bonem pikinini, ol
totel sta lego pikinini blo olgeta
lo sanbuji mo go bakh lo ol ples blo
fameem kakae, kassem next taem

Oli swim go lo ol wota closap
lo sanbuji blo taem blo go up
mo kan wan adol totel

Oli go bak lo ples we hemi
bon blo kat pikinini blo hem

Oli totel oli ko lo ol ples blo
fameem kakae mo lo wet kasem



EUROPEAN UNION



Sweden
Sverige



Pacific-European Union Marine Partnership Programme



SPREP
Secretariat of the Pacific Regional
Environment Programme



