

# Gaed long ol toksave blong ol fising komiuniti long Vanuatu



Pacific  
Community  
Communauté  
du Pacifique

The Locally-Managed Marine Area (LMMA) Network



Improving the practice of marine conservation



UNION EUROPÉENNE





# Gaed long ol toksave long fiseris manejmen blong ol komiunitis

Gaed ia hemi introdusim olgeta toksave long ol impoten grup blong ol spisis long solwota we yumi yusum olsem kakae long ol aelan blong Pasifik. Toksave ia the Pacific Community (SPC – [www.spc.int](http://www.spc.int)) i bin wok wetem Locally-Managed Marine Area Network (LMMA) ([www.lmmanetwork.org](http://www.lmmanetwork.org)) blong produsim.

Papos blong ol toksave ia hemi blong helpem ol komiunitis mo pipol we oli wok wetem olgeta blong provaedem infomesen long ol spisis we olgeta i gat intres long olgeta mo advaes long ol stret fiseris manejmen opsens we olgeta oli save jusum blong yusum. Fiseris manejmen we i bes long komiuniti fiseris hemi involvem fising komiuniti blong tekem men rol long manejmen blong fiseris risos we olgeta i dipen long hem long saed blong sikiuriti blong kakae mo semtaem fasin blong winim mani. Blong mekem hemia, ol komiuniti oli nidim ol teknikal infomesen mo advaes long ol spisis blong risos we oli stap yusum.

## GAED IA HEMI GAT OLGETA SEKSENS OLSEM:

1. Pepa blong toksave we i stap rere blong yusum
2. Olgeta fis long ol fiseris klosap long so long ol aelan blong Pasifik
3. Ol fasin blong fis klosap long so mo ol tul blong fising
4. Manejmen blong fiseris tru long ol komiunitis
5. Ol fasin blong manejem fiseris
6. Ol marin risev we komiuniti i manejem o ol tabu eria we ol man i no save tekem fis aot long olgeta
7. Ol toktok we i save gohed insaed long ol fising komiuniti
8. Ol toktok we yumi yusum long fiseris wanem nao oli minim





# 1 Ol pepa blong toksave we i gat i stap finis

Ol pepa blong toksave we oli listim long ol namba daon ia oli provaedem infomesen long ol impoten spisis blong solwota mo ples we oli stap long hem we yumi save faenem long ol aelan blong Pasifik. Wanwan pepa i givim infomesen long wan spisis mo ples we hemi stap long hem mo ol difren fasin blong manejmen we yumi save jusum. Ol 29 pepa blong toksave ia i stap finis long the Pacific Community (SPC) mo ol nara

pepa oli SPC save mekem folem rikwes. Gaed ia I mas stap sef oltaem blong yusum naoia mo blong yusum olsem refrens long fiuja, taem yumi yusum ol pepa blong toksave ia.

Ol pepa blong toksave ia wok blong olgeta i no blong helpem yu blong luksave ol defren kind spisis; i gat sam long ol nasonal, FAO mo SPC publikesen we oli stap blong yusum from pepos ia.

| Fis we i gat fin                | Animol we i no gat bun long bak                |
|---------------------------------|--|
| 1. Los (Epinephelidae)          | 9. Besdemea/Si-kukumba (Holothurians)          |
| 2. Piko (Siganidae)             | 10. Natalae (Tridacnidae)                      |
| 3. Redmaot (Lethrinidae)        | 11. Troka ( <i>Tectus niloticus</i> )          |
| 4. Blufis (Scaridae)            | 12. Krab Kaledoni ( <i>Scylla serrata</i> )    |
| 5. Rif snapa (Lutjanidae)       | 13. Naora blong solwota (Palinuridae)          |
| 6. Karong (Carangidae)          | 14. Krab kokonas ( <i>Birgus latro</i> )       |
| 7. Malet (Mugilidae)            | 15. Nawita                                     |
| 8. Poketnaef fis (Acanthuridae) | 16. Grin snel ( <i>Turbo marmoratus</i> )      |
| 17. Sak blong rif               | 19. Si ejen                                    |
| 18. Stingre mo flat bodi fish   | 20. Posen stafis ( <i>Acanthaster planci</i> ) |
|                                 | 21. Flat naora blong solwota (Scyllaridae)     |
|                                 | 22. Kokias ( <i>Anadara sp.</i> )              |

## Ol narawan

|                                   |  |
|-----------------------------------|--|
| 23. Ol si wid we man i save kakae | 27. Niutrien mo sedimen                                      |
| 24. Spawning aggregations         | 28. Ol nalulum we i save spoelem ol animol blong solwota ... |
| 25. Ol natongtong                 | 29. Fis we i kakae ol plant                                  |
| 26. Ol si gras                    |  |



## 2 Ol fis long ol fiseris klosap long so long ol aelan blong Pasifik

El gat 200 go kasem 300 spisis blong fis we oli stap kasem long ol eria klosap long so long ol aelan blong Pasifik. Tebel we i stap daon (aot long Dalzell mo Schug, 20021) i soem stret kaen fis we oli kasem evri taem long 15 ples long wes

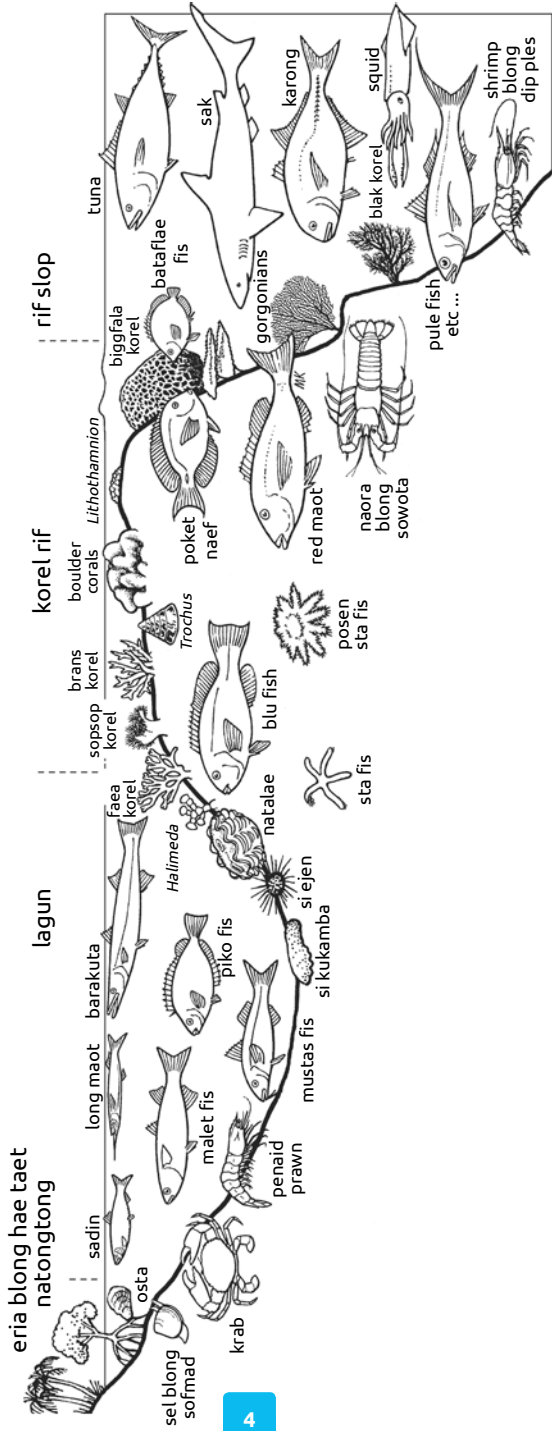
mo sentrol eria blong Pasifik. Klosap evri namba tri fis blong totol blong ol fis ia we oli kasem oli redmaot (Lethrinidae), poketnaef fis (Acanthuridae) mo rif snapa (Lutjanidae).

| Common name    | Family name   | Percentage |
|----------------|---------------|------------|
| Redmaot        | Lethrinidae   | 13.32      |
| Poketnaef fis  | Acanthuridae  | 10.91      |
| Rif snapa      | Lutjanidae    | 9.19       |
| Karong         | Carangidae    | 7.19       |
| Los            | Epinephelidae | 6.96       |
| Malet          | Mugilidae     | 6.90       |
| Blufis         | Scaridae      | 6.58       |
| Tuna/manggru   | Scombridae    | 5.53       |
| Mustasfis      | Mullidae      | 3.25       |
| Piko           | Siganidae     | 2.92       |
| Redfis blo rif | Holocentridae | 2.69       |
| Barakuta       | Sphyraenidae  | 1.53       |
| Bunfis         | Albulidae     | 1.36       |
| Grunts         | Haemulidae    | 0.89       |
| Longmaot       | Belonidae     | 0.81       |
| Strongskin     | Balistidae    | 0.74       |
| Napoliang      | Labridae      | 0.52       |
| Mojarras       | Gerridae      | 0.49       |
| Longmaot       | Hemiramphidae | 0.17       |
| Melekkfis      | Chanidae      | 0.15       |
| Surf perches   | Theraponidae  | 0.03       |
| Ol narawan     |               | 17.87      |

<sup>1</sup> Dalzell P. and Schug D. 2002. Synopsis of information relating to sustainable coastal fisheries. Technical Report 2002/04. International Waters Programme, Programme régional océanien pour l'environnement (PROE), Apia, Samoa.



**Profael blong wan lagun mo baria rif sistem wetem sam long ol spisis we i stap long hem**





# 3 Ol fasin mo tuls blong fising mo klosap long so

I gat plante kaen blong tul blong fising we oli yusum long ol fising komiunitis mo oli diskraebem sam long olgeta men wan long seksen ia.

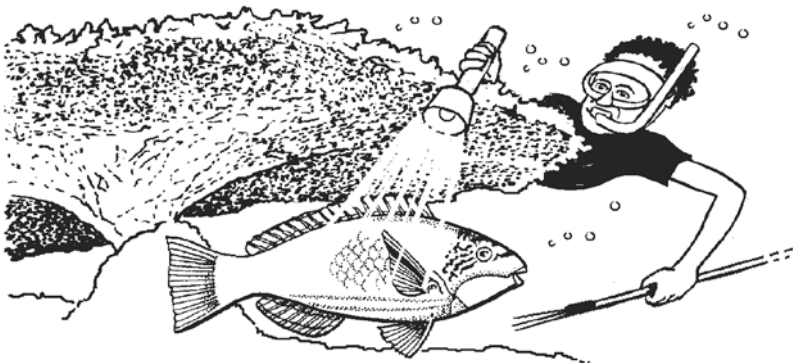
## KAREM RISOS LONG RIF

Karem ol animol mo ol si wid blong solwota long lagun o long rif taem solwota i drae hemi wan kaen aktiviti we yumi stap mekem evri taem, eespeseli ol mama mo ol pikinini. I gat plante kaen animol blong solwota we oli stap karem long fasin ia, olsem si-kukamba, si ejen, krab, snel blong solwota, si wid, namarae, smol fis, wom, naggalat blong solwota mo nawita.

Naora oli stap kolektem antap long rif long naet. Blong karem ol samting ia, yumi save yusum han, sam long olgeta yumi mas digim insaed long sanbij o sofmad wetem leg, sam yumi kapsaetem ston o korel o brekem korel, mo yusum stik mo huk blong pulum nawita, krab o fis aot long hol insaed long rif. Taem yumi stap mekem ol kaen fasin ia samtaem yumi karem smol amaan blong kakae nomo be damej long rif mo long laef blong solwota i save bigwan tumas.

## YUSUM SPIA

I gat ol difren kaen wei we yumi stap yusum spia long hem, olsem antap mo insaed long solwota. Yu save yusum spia taem yu stap long saed blong solwota o taem yu stap long wan bot o yu stap daeva andanit long wota wetem masket blong daeva. Ol fisa oli stap yusum toslaet mo spia long naet blong kasem fis taem solwota i drae. Ol yus blo ol niu kaen tul, olsem toslaet we yu save yusum andanit long wota, i gat bigfala ifek long sam long ol laef blong solwota we i stap klosap lo so. Sam long ol bigfala fis, olsem blufis, oli slip olbaot long korel long naet blong protektem olgeta long ol nara kaen fis we i save kakae olgeta, mekem se i isi tumas blong wan man i save kasem olgeta wetem toslaet mo masket blo daeva. Glas blo daeva, fin, tul blong SCUBA, aean spia mo masket blong daeva i inkrisim sakses blong kasem fis wetem spia.

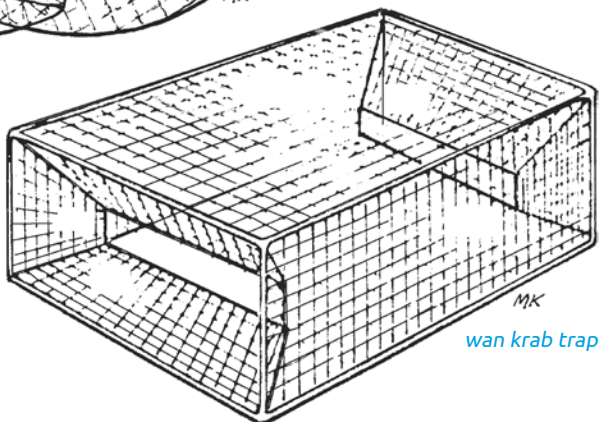
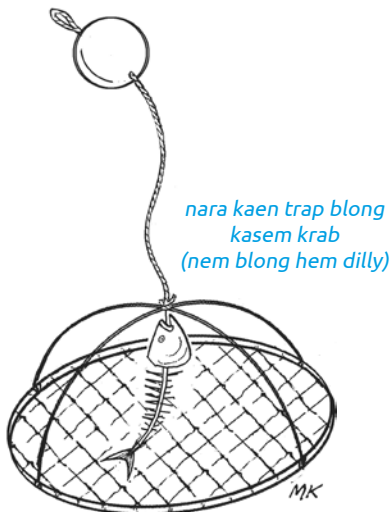
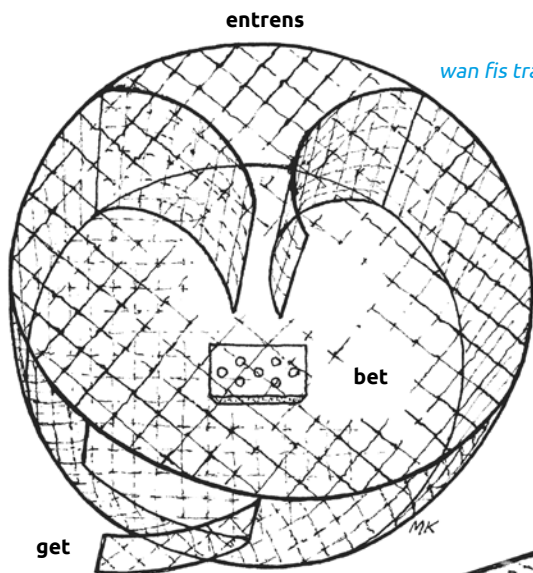




## OL TRAP WE YU SAVE MUV RAON WETEM

Ol trap we oli mekem wetem waelken, bambu mo wud blong natongtong oli stap yusum truaot long Pasifik long plante handred yia finis. Yus blong ol materiel blong tedei, olsem net we oli mekem wetem naelon mo net blong waea, i mekem trap i isi blong bildim mo yus blong hem i spadaot bigwan. Stampa tingting blong trap we i gat

bet hem i se ol animol we oli luk trap ia mo oli wantem tekem bet ia, oli go insaed long trap ia tru long wan do we i bigwan long afsaed mo smolsmol long insaed, mekem se i had blong ol animol we oli stap insaed long trap ia blong ronwe. Bet trap o pot oli stap yusum blong kasem krab mo ol nara kaen fis we oli kakae mit.



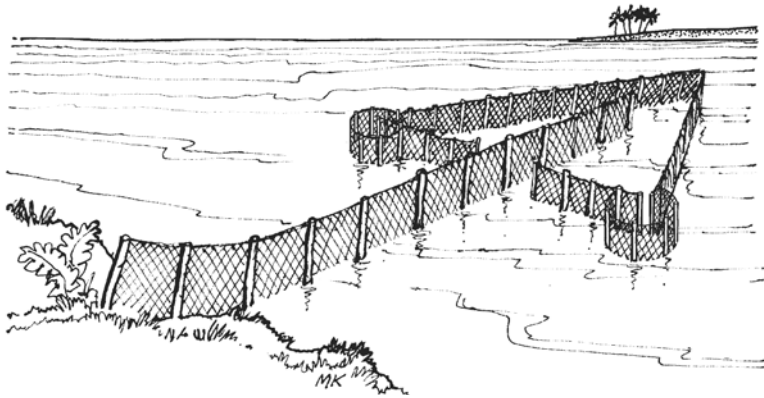




## TRAP WETEM WOL MO FANIS

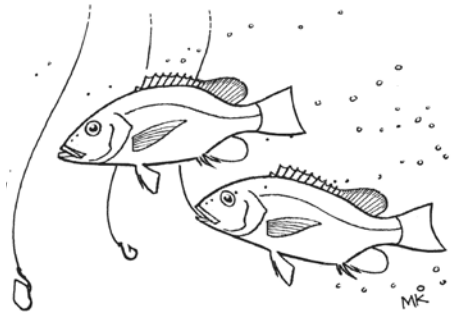
Wan trap wetem wol mo fanis hemi wan long ol olfala wei blong komiuniti i kasem fis. Hemi wan isi tradisinol trap we oli stap yusum taem solwota i drae blong blokem fis insaed long ol wol blong ston o korel we i stap olsem leta V o long haf sekel. Oli save putum wan net long ples we rif i open blong kasem ol fis taem oli wantem go bak long dip wota taem we solwota istat blong drae. Long ol fanis trap i gat wan fanis or wan wol we oli bildim long raet ankel long laen blong so o long rif blong blokem ol fis we oli stap muv i go tugeta long

wan ples we i blok istap. Taem we fis i kasem fanis oli swim folem fanis go kasem ples we i blok istap mo oli no save ronwe long hem. Ol fasin blong mekem fanis ia oli folem kastom blong olgeta mo oli defren long ol defren ples. Long long taem bifo oli stap mekem fanis ia long ston be naoia oli save mekem wetem ol materiel blong tedei olsem net waea. From i no hadwok blong oli mekem mo from plante man i stap mekem olsem i minim se i stap mekem namba blong fis olsem malet i stap godaon plante.



## HUK MO LAEN WETEM BET

Huk mo laen oli yusum long ol defren kaen fasin. Wan we yu holem long han nomo i wan isi tul blong mekem from i gat wan o plante huk we oli fasem i go long wan laen mo wan wet i stap long en blong laen ia taem oli yusum blong kasem fis we i stap daon long botom blong solwota. Ol huk blong tedei we i raon oli sem mak nomo long kaen huk we oli mekem aot long bun o sel we oli stap yusum long long taem bifo long ol aelan blong Pasifik.



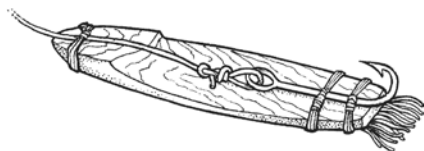


## TOLAE N MO LUA

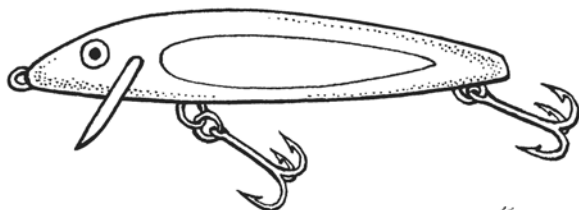
Wan lua hemi wan samting we man i faenem o mekem blong atraktem ol fis blong kam long hem. Yu save luk sam eksampol daon. Lua we i stap long en blong fising laen wan bot i save toem o pulum long tolaen ia (trolling) insaed long ol eria klosap long so blong kasem ol karong mo snapa. Evri lua oli mekem blong atraktem fis from oli gat sam long ol fasin ia olsem: taem we lura i to long wota, lua i stap muvmuv (olsem wan fis we i gat kill), lua i stap saen o aotsaed blong hem i mekem sado, mo long en blong wan lura i gat feta, plastik, raba o kaliko we stap muvmuv.

Long tekem ples blong yusum ol lua we oli stap mekem long faktri, yu save yusum wan smol fis we i stap saen, olsem long maot fis mo flaeing fis, o wan pis blong wan bigfala fis we i save stap long wan o plante huk olsem wan najarol bet blong tolaen.

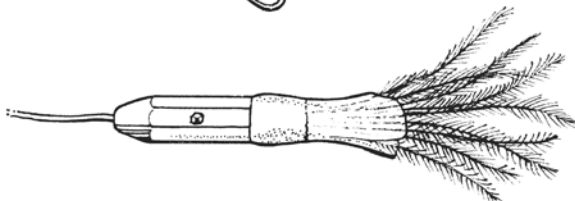
Yu save yusum wan lua taem yu sakem laen. Long fasin ia, yu fasem lura i go long laen we istap long wan fising rod. Rod ia yu yusum blong sakem laen mo lua igo long solwota mo yu tanem smol wil long rod blong pulum lua i kambak.



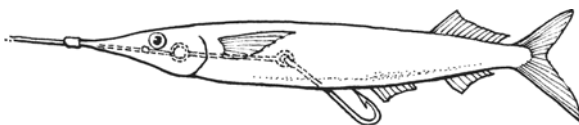
*wan tradisonel lua we oli mekem long sel wetem wan aean huk*



*wan strong lua we oli mekem long faktri blong daeva wetem*



*wan fising lua we i sofsosf we oli mekem long faktri*

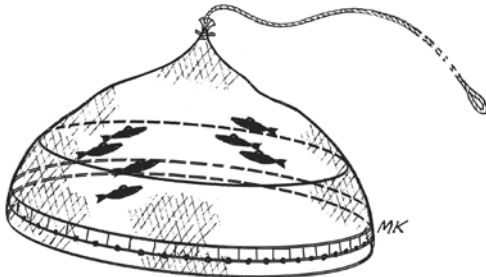


*wan longmaot we yu save yusum olsem nataral bet*



## CAST NET

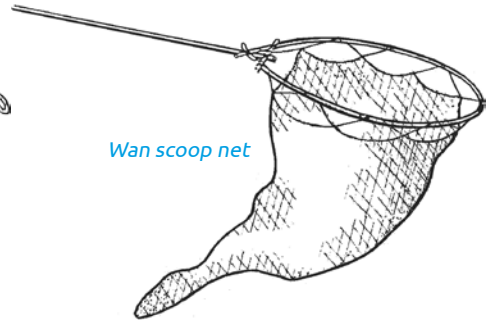
Cast net hemi wan raon net we yu stap sakem taem yu stap long so o aot long wan smol bot o kanu long ol ples we wota i no dip. Taem yu sakem net ia, hemi open olsem wan parasut. Olgeta wet long saed blong hem i stap pulum net i go daon ova long ol fis we i stap wan ples mo net i klos taem yu pulum nara en blong hem. Ol fis we net ia i save kasem hemi ol sadin, malet, piko mo mangru.



*Wan cast net afta we yu sakem*

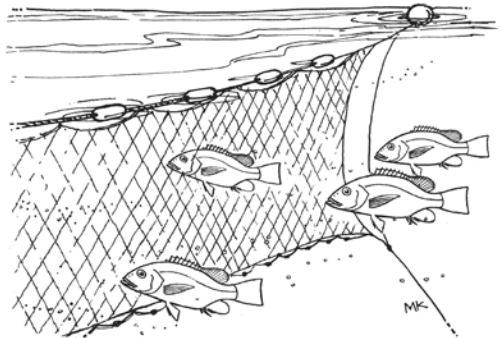
## SCOOP NET

Scoop net, sep blong hem i olsem wan kon we i hang daon aot long wan sapot we i gat handel blong hem. Scoop net yu save yusum long naet taem yu yusum wan laet blong kasem ol smol fis mo naora.



## GILL NETS

Gill net i wan kaen net we i gat flota raon long top blong hem mo ol wet long botom blong hem, minim se i save hang daon stret insaed long wota. Net ia yu save fasem hem blong hang long wota we i no dip blong kasem some kaen fis olsem malet o mangru. Net ia oli stap mekem long ol naelon tred we klosap yu no save luksave, mo i save fas bihaen long sora (gill) blong fis. Saes blong hol blong ol net ia oli wokem blong kasem stret saes blong wan kaen fis; wan gill net we oli prepea gudwan wetem stret saes blong ol hol blong net i save letem ol smol smol fis mo fis we i big wan tumas i save ronwe.

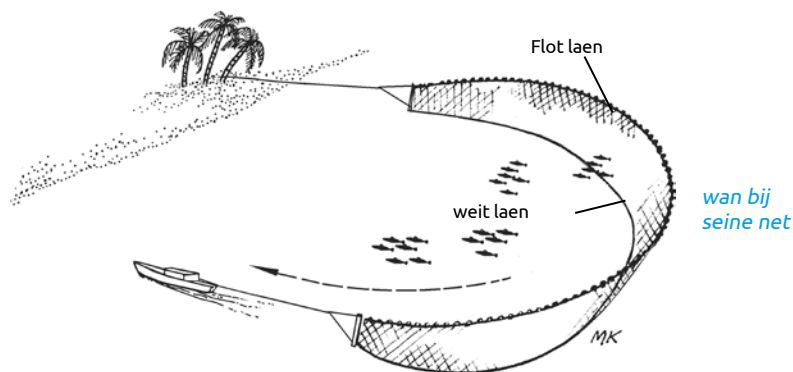




## SEINE NETS

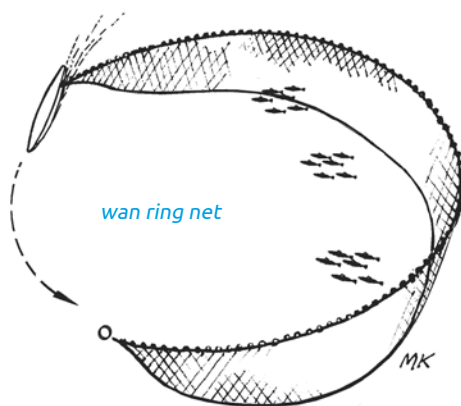
Wan seine net (santaem oli kolem beach seine sipos oli setemap long so) i gat longfala panel blong ol net we i raonem fis, stat long wan en blong so go kasem nara en blong so mo net ia i pulum ol fis i kam long so. Net ia hemi gat ol wet blong kipim botom blong net i stap strong wetem sandbis mo flota we i mekem net i flot i stap antap. Sam blong ol bij seine oli gat wan net

bakegen long medel blong olgeta we i slak mo i olsem wan bag blong holem taet fis. Ol fasin blong sakem seine net i difren oltaem be plante taem en blong net ia i mas gat wan angka we i stap long so mo wan bot we oli yusum blong putum net ia long wan haf sekel wetem en blong hem long so bifo oli pulum i kam (luk long pikja).



## RING NETS

Ring net hemi wan bigfala net we oli yusum blong raonem fis. Plante taem, wan en blong net oli taetem i go long wan flota mo wan bot i pulum net i go raon long grup blong fis. Taem we net i raonem fis olsem wan sekel, nara en blong net i taet istap long fored blong bot. Yu pulum net ia slo slo bihaen long bot blong mekem sekel blong net i kam mo smol mo blong pulum ol fis i stap tugeta long smol en blong net. Yu save kilim wota blong mekem fis oli fraet mo go insaed long net. Yu gohed blong pulum net nomo mo karemaot ol fis we i stap long net taem we net i stap kam insaed long bot. Santaem oli yusum ol ring net long naet wetem wan laet we i stap long bot blong atraktem fis.





## 4 Hao ol komiuniti i manejem fiseris

Bigfala pepos blong manejen blong fiseris, sapos hemi stap long han blong komiuniti o sapos i stap long han blong otoriti blong fiseris, hemi blong mekem sua se fising hemi saste-nebol. Sapos manejen hemi wan saksas, ol kakae blong solwota bae i stap oltaem blong yumi tedei mo blong olgeta we i kam afta.

Blong fising i stap sastenebol, i minim se yumi mas stap alaoem ol bigfala fis blong laef long-taem inaf blong save mekem ol smol pikinini fis, we plante bae oli gru bigwan mo oli save stap oltaem blong yumi save kasem olgeta long fiuja, mo blong protektem ol envaeromen we ol fis mo ol nara animol blong solwota i stap laef long hem. Ol impoten envaeromen ia hemi olgeta natongtong, ol si gras mo ol korel.

Kaen fasin ia blong lukaotem fis be semtaem blong lukaotem eria we olgeta i stap long hem oli kolek ecosystem approach long manejen blong fisers. Taem ol komiuniti blong yumi oli yusum fasin ia, naolia oli kolek hem community-based ecosystem approach to fisheries management (CEAFM). Hemia i wei we oli manejem fiseris, be sem taem oli stap lukaotem ol samting we i stap laef tugeta wetem ol nara samting long ples blong olgeta, long wan wei we olgeta lokol komiuniti oli wok wanples wetem nasonal gavman o ol nara patna.

**Yumi no mas foget se stampa tingting blong manejem ol fiseris i blong manejem yumi ol pipol. Plante taem hemi minim se yumi mas blokem ol pipol blong no tekem tumas fis, mo no yusum ol fasin blong fising we i stap spoem envaeromen blong solwota.**

Ol komiuniti oli sud yusum ol infomesen we i stap blong manejem ol risos blong solwota. Ol infomesen long saed blong saens i stap wetem ol advaesa blong komiuniti, olsem ol totel monita, wetem nasonal fiseris dipatmen mo wetem ol non-gavman oganaesesen we i stap olsem Wan Smol Bag, mo ol oganaesesen olsem SPC. Be antap long evri samting ia, ol komiuniti i sud yusum ol save blong ol fisa blong ples blong olgeta. Ol pipol we oli stap fising long ples ia plante taem oli save long wea ples mo long wanem taem ol fis i stap mekem pikinini. Maet tu oli save wiswan fasin blong fising i spoem fiseris wetem envaeromen blong solwota.

Plante fasin o tul oli stap rere blong yusum blong manejem fiseris mo sam oli stap long list long seksen 5. Plante long ol fasin ia oli bin stap mekem long ol fising komiuniti blong ol aelan long Pasifik ova long plante handred yia finis.

No mata wanem kaen tul blong manejen yumi yusum, i impoten blong luksave sapos tul ia i ajivim wan saksas. Insaed long wan komiuniti, i stret blong luk sapos fasin blong manejem fiseris i impruvum o i kipim long sem mak namba blong ol fis we oli kasem.

**From rison ia, i mas gat ol ansa long sam kwestin, olsem olgeta ia:**

- **Risev blong fis (tabu eria) i wok gudwan? Namba blong fis i stap go antap?**
- **Ban (o tabu) long saed blong fising wetem net hemi mekem namba blong ol fis i go antap?**
- **Tabu long saed blong no kasem sam kaen fis hemi minim se namba blong fis i go antap?**



Sapos fasin blong manejem fiseris we komiuniti i yusum fastaem i no wok gudwan tumas, olgeta i sud traem sam nara wei. Hemia i wan fasin blong wok we ol man blong saens long fiseris oli givim nem blong hem adaptive management – hemia i blong gohed blong traem wan stret fasin blong manejem mo afta blong luk sapos hemi wok gudwan; sapos i no gat ol gud risal, oli jenisim fasin ia smolsmol o oli traem wan difren fasin.



Ol fisa long wan komiuniti i intres plante sapos fasin blong manejem fiseris hemi minim se, naeia o long fiuja, namba blong fis i go antap long eria blong olgeta. Ol stampa fasin we yumi save luksave se fasin i wok gudwan i hamas fis oli save kasem (catch rate) mo saes blong olgeta fis ia (luk long 7e mo 7f long seksen 7)

Catch rate hemi minim hamas fis oli save kasem long wan taem o, blong luk long hem long wan nara wei, hamas taem i tekem blong kasem hamas fis, olsem i tekem hamas taem blong tekem wan rop blong fis, wan basket blong klam, or wan namba blong naora.

Sapos taem blong fising i go antap, i minim se namba blong fis maet hemi stap godaon mo fasin blong manejem i no stret. **Long eksampol ia, oli mas yusum wan difren kaen fasin blong manejem, sapos no ademap sam mo fasin blong manejem long fasin we oli yusum fastaem.**

Sapos taem blong fising i stap semak, i minim se maet namba blong fis i stap sem mak. **Long eksampol ia, maet oli save tingbaot hao blong ademap sam mo fasin blong manejem o hao blong jenisim olgeta smol.**

Sapos taem blong fising i go daon, maet i minim se namba blong fis o ol nara animol blong solwota i go antap. **Long eksampol ia, maet ol fasin blong manejem i stret.**

Fasin blong luk long sakses blong fasin blong manejem we i dipen long infomesen we i kam long ol lokol fisa samtaem oli singaotem hem data-less management, from hemi no dipen long ol sevei we ol man blong saens blong fiseris i wokem, we samtaem hemi yusum plante taem mo vatu.



## 5 Ol fasin blong manejem ol fiseris

Ol fasin blong manejem ol fiseris i inkludim ol rul we nasonal dipatmen blong fiseris i mekem, mo ol rul we wan komiuniti i putum, blong traem mekem sua se fising hemi sastenebol mo ol namba (stock) blong fis bae i gohed blong provaedem kakae long fiuja. Maet oli save yusum plante difren kaen fasin blong protektem ol difren spisis mo sam long olgeta i stap long list daon.

**I no evri wan long ol fasin ia we i stret blong yusum wetem evri kaen spisis. I gud blong luk long wanwan pepa blong toksave blong faenemaot wiswan fasin i stret long wiswan spisis.**

- **Blong limitim amaon blong fising:** wan rul we i limitim hamas pipol i save stap fising o hamas taem oli save spendem blong fising: wan eksampol, oli save alaoem ol pipol blong wan komiuniti nomo blong fising.
- **Blong limitim kaen tul blong fising o sakses blong wan kaen tul:** wan rul we hemi mekem i tabu o we hemi kontrolem yus blong tul we i save damejem ol stok blong fis o we i save wok gudwan tumas; olsem, no letem ol fisa i yusum ol gill net we oli longfala tumas o we hol blong olgeta i smol tumas, o blong mekem i tabu blong yusum ol tul olsem SCUBA we i alaoem daeva blong pulum win taem hemi stap anda long solwota, long ol fiseris we oli daeva from fis.
- **Blong limitim hamas fis oli save kasem:** wan rul we hemi limitim namba o wet blong fis we oli save kasem; olsem limit we i stap long hamas troka yu save kasem long sam kaontri.
- **Blong limitim saes blong fis we yu save kasem blong i no smolwan tumas:** wan rul we i talemaot saes blong wan fis we i no save go anda long hem; rison blong rul ia plante taem hemi blong alaoem wan fis blong mekem pikinini wan taem o mo bifo oli kasem hem.
- **Blong limitim saes blong wan fis we yu save kasem blong i no bigwan tumas:** wan rul we i talemaot saes we wan fis i no save go antap long hem; rison blong rul ia plante taem hemi from ol woman fis we i bigwan mo oli produsim mo eg o from ol fis we i mo bigwan valiu blong olgeta i no hae tumas.
- **Blong no kasem ol woman krab mo naora we oli karem eg:** wan rul we i mekem se ol fisa i mas putum igobak long solwota eni woman krab o naora we i gat eg blong givim taem long olgeta blong produsim pikinini blong olgeta.
- **Taem we ol eria blong fising o ol taem blong fising i klos:** wan rul we i talem se i no save gat fising, maet long wan taem o sison o maet long wan ples, o tufala tugeta; olsem eksampol, maet wan ples we fis i stap mekem eg i save klos long sison blong hem evri yia.
- **Ol resev blong fis (ol eria we oli no save tekemaot fis long eni taem):** wan eria we ol man i no save go fising insaed long hem; maet hemi blong alaoem namba blong fis i go antap mo blong ol fis i save gru mo mekem pikinini; tingting blong wan komiuniti i se blong blokem ol pipol blong no tekem fis insaed long wan pat blong tradisinel eria blong fis blong olgeta i save mekem ol namba blong fis long ol ples klosap i go antap long fiuja. Oli tokbaot ol fis resev olsem wan spesol eksampol long Seksen 6.

**Hemi impoten blong luksave se i no save gat wan long ol fasin blong manejem wan fiseris we i save wok sapos ol pipol i no agri blong respektem eni rul we i stap mo sapos ol lida blong komiuniti i no mekem se oli folem.**

Long klosap evri fiseris maet i gat nid blong yusum wan o antap long wan fasin blong manejem o rul blong mekem se stok blong fis hemi sastenebol.



## 6 Ol fis risev we komiuniti i stap manejem o ol eria we ol man i no save tekem fis aot long hem

From fis resev, solwota resev o tabu eria hemi wan long olgeta tul we plante komiuniti oli setemap finis o oli stap tingbaot yet long plante long ol aelan blong Pasifik, oli tokbaot olgeta long ples ia olsem wan spesol eksampol. Be blong setemap wan tabu eria hemi wan nomo long ol fasin we ol komiuniti i save tekem blong protektem olgeta fis; oli no wok sem mak wetem evri nara kaen animol blong solwota.

No mata long hemia, ol tabu eria oli save help bigwan blong protektem plante long ol plant mo animol (biodiversity) blong wan eria inkludim ol ples we fis i stap laef long hem, ol ecosystem mo ol spisis we i dipen long hem. Be ol man ples we oli nidim blong tekem ol kakae blong solwota long evri dei oli intres mo, sapos resev hemi save mekem namba blong fis i go antap long ol eria blong fising we i stap klosap.

**Sakses blong wan resev blong solwota, wan tabu eria, hemi dipen long sam samting, olsem saes blong resev mo ples we hemi stap long hem mo ol spisis we oli manejem insaed long hem. Ol men samting blong tingbaot i olsem:**

→ Blong ol spisis we oli stap muv olbaot plante olsem malet yu no save yusum wan resev we i smol tumas;

→ blong ol spisis we i muv igo long ol eria blong produsim eg blong olgeta we i stap long wei aot long resev, wan smol lokol resev i no save protektem olgeta blong oli no kasem olgeta taem oli muv igo tugeta blong putum eg blong olgeta;

→ blong ol spisis we oli gat wan sot taem we ol pikinini blong olgeta i stap flot (olsem troka), taem oli mekem pikinini oli produsim ol yangfala we maet oli go olbaot insaed long resev mo long ol eria blong fising we i stap *klosap*. Hemia i minim se ol smol resev nomo oli save gat sakses blong bildimap ol populesen *klosap*, eespeseli sapos resev hemi stap long wan ples we taed i save karem olgeta aot long resev i go long eria blong fising;

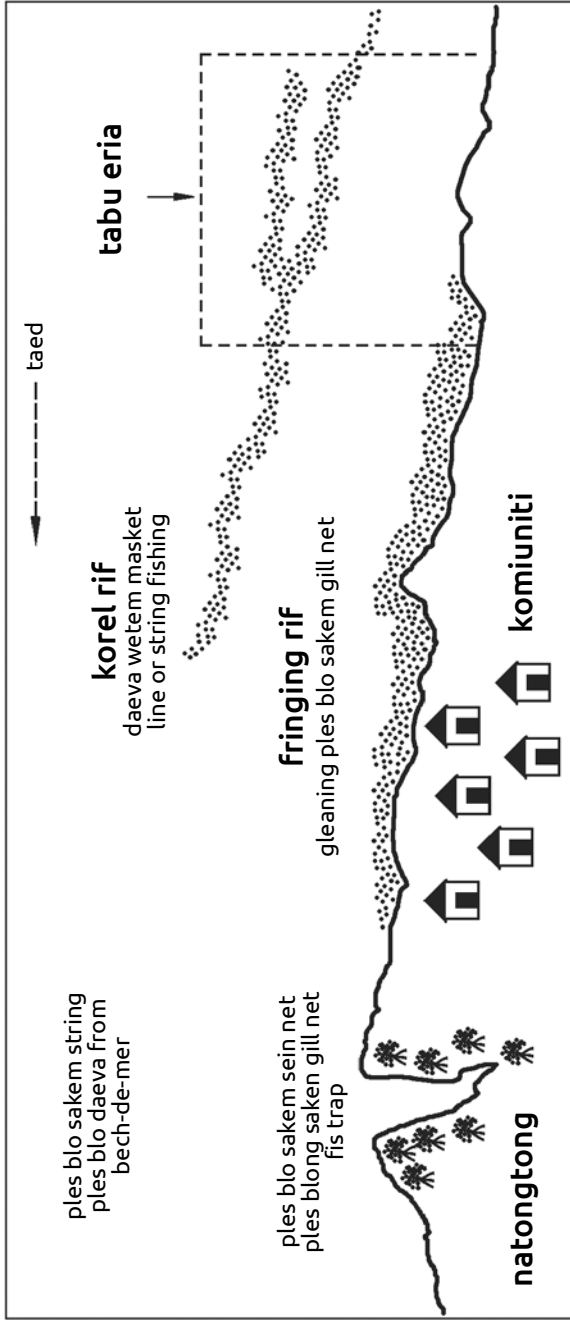
→ blong sam spisis we i gat wan long taem we olgeta pikinini i stap gru (olsem naora), taem oli mekem pikinini maet olgeta yangfala oli go long wei aot long resev mo ol lokol eria blong fising. Hemia i soem se ol lokol resev blong fis maet oli no wok gudwan blong bildimap wan *lokol* populesen blong spisis ia long ples ia nomo. Kaen resev olsem maet oli gud long wan eria we i mo big *olsem long wan rijen o long ful kaontri*, eespeseli sapos i gat wan bigfala namba blong ol smol resev olsem we i seraot long laen blong kos.





## Ol eria we oli manejem

Wan eria we oli manejem hemi wan we i gat ol risos we oli mas manejem. Hemia i inkludim wan tradisinel graon blong fising we komiuniti blong ples ia mo maet sam mo komiuniti oli gat sam kontrol ova long hem.



Map ia antap i soem wan eria blong menejmen wetem ol impoten samting long hem, olsem fores blong natongtong, rif we i stap klo-sap long so, korel rif mo sam eria blong fising. Maet wan eria blong manejem hemi inkludim wan tabu eria, be i no oltaem. Smol not: oli putum tabu eria i stap long wan ples we taed i save karem ol smol pikinini blong risos we oli stap flot aot long resev i go long ol eria blong fising.



# 7 Ol toktok we i save gohed insaed long ol komiuniti blong fising

Seksen ia hemi givim wan gaed blong ol samting we ol komiuniti blong fisa oli sud tokbaot. Ol toktok ia i mas tekem ples long saed blong ol fasin blong risos manejen blong wan komiuniti blong mekem sua se komiuniti i yusum gudwan ol lokol mo tradisinel save we i stap. Fasin ia tu i mekem sua se manejen blong fiseris hemi stap stret long han blong fiseris komiuniti.

**a) Wanem i stret nem long lanwis blong komiuniti blong spisis ia?**

Ol komon nem insaed long wan kaontri maet oli difren long wanwan ples, olsem wetem yumi long Vanuatu evri lanwis i gat stret nem blong hem blong wanwan spisis. Hemi impoten tumas blong mekem sua se evriwan i stap tokbaot sem spisis o grup blong spisis. Maet i gud blong gat ol pikja o ol foto blong olgeta spisis long taem blong ol miting.

**b) I gat eni rul long saed blong nasonal fiseris we i aplae long kaen spisis ia?**

Ol nasonal rul oli kam fastaem ova long ol rul blong komiuniti. I impoten tumas blong save sapos i gat eni rul we i aplae long komiuniti mo tu se ol fisa blong komiuniti oli save long olgeta. Ol rul blong komiuniti i no mas go agenstem o brekem ol nasonal loa mo rul.

**c) Wanem i eria blong komiuniti blong fising long hem blong kasem spisis ia (o grup blong spisis)?**

Yu mas rikodem eria blong fising long wan map blong eria we yu stap manejen (o long eria we yufala i manejen long fiuja) mo inkludim ol eria blong intres, olsem ol rif mo ol mak blong laen blong so. Mekem not blong eria we oli damej tru long aksen blong ol pipol, inkludim olgeta aotsaed long komiuniti (olsem ples we sanbis i blokem wota, ples we ol pipol i sakem rabis, mo ol nara kaen polusen).

**d) Komiuniti i gat sam control ova long fising eria blong hem?**

Sam komiuniti i gat tradisinel kontrol ova ol eria blong fising we i stap klosap. Sapos ol komiuniti i no gat kontrol, sam kaontri, olsem Tonga, oli bin setemap Special Management Areas (SMAs) we i alaoem ol komiuniti blong manejen fiseris blong olgeta.

**e) Long wiswei ol catch ret (hamas fis oli kasem long wan dei, o wan fising trip) oli jenis ova long 10 yia we i pas?**

I impoten tumas blong gat sam tingting long eni jenis long hamas fis komiuniti i kasem, hamas taem hemi tekem blong kasem wan basket o rop blong fis 10 yia i pas finis mo 5 yia i pas finis; hao nao yu save komperem namba blong fis we oli kasem bifo wetem nao ia? Olsem wan rul we i jenerol tumas, sapos i tekem ol pipol tu taem tedei blong kasem sem namba blong fis komperem wetem taem bifo, maet i minim se stok blong fis oli klosap flatem. Sapos i tekem ol pipol bitim long tu taem blong kasem sem namba blong fis we oli kasem bifo, maet i minim se stok blong fis oli flatem olgeta.

**f) Hao nao longfala blong fis oli jenisim ova long 10 yia we i pas?**

Taem yu fis, plante taem yu tekemaot ol fis we i mo big aot long populesen blong fis. Sapos nomol saes blong wan kaen spisis we yu kasem i godaon, maet i minim se yu stap fisim kaen ia tumas. I gat nid blong putum sam fasin blong manejen blong protektem spisis ia.



**g) Olgeta fisa long komiuniti oli yusum wanem kaen fasin blong fising?**

Komiuniti maet hemi yusum sam kaen fasin blong fis we i defren long olgeta we i stap long ol pepa blong toksave. Sam long ol fasin ia yu ting se oli damejem populesen blong spisis o envaeromen blong solwota?

**h) Spisis ia hemi gat wan stret sisen blong putum eg o wan stret ples we oli wokem?**

Maet sam memba blong komiuniti oli save gat wan ansa long kwestin ia. Infomesen ia komiuniti i save yusum blong manejem fiseris blong olgeta, maet oli katem daon o blokem olgeta blong no fising long sam taem blong yia o long sam ples.

**i) Yu save mekem wanem blong mekem namba blong spisis ia we oli kasem i kam mo sastenebol?**

Maet ol memba blong komiuniti i save givin tingting blong olgeta long hao blong tekem sam praktikol fasin blong manejem. Ol tingting ia oli save tokbaot wetem ol fasin blong jusum we i stap long wanwan long ol pepa blong toksave.

**j) Komiuniti blong fising oli gat stampa tingting mo abiliti blong tekem ol disisen blong manejem long intres blong sastenem ol namba blong fis we oli kasem mo blong lukaotem gudwan ol fiuja jeneresen?**

Trifala samting we wan manejem blong fiseris blong wan komiuniti i nidim i luksave, wari mo aksen. Wan komiuniti i mas luksave ol problem blong fiseris blong olgeta mo oli mas stap wari long olgeta inaf blong mekem oli tekem ol strong mo independen aksen.

**k) Komiuniti blong fisa hemi glad blong mekem sua se komiuniti i folem ol rul we oli mekem?**

Saksen blong fiseris manejem blong wan komiuniti i dipen bigwan long ol memba blong komiuniti blong respektem ol rul blong manejem we oli mekem. Wanem maet komiuniti o ol lida blong hem i save mekem long olgeta we oli no folem ol rul ia we komiuniti i bin mekem?





## 8 Ol toktok we yumi stap yusum long fiseris wanem nao oli minim

No mata we olgeta we oli raetem ol pepa blong toksave oli no yusum tumas ol teknikal wod, maet yu save faenem ol mining blong wod (daon) we i save helpem yu.

**Adult:** wan taem long laef blong wan spisis we hemi grup finis.

**Ciguatera:** (sik blong fis) hemi kamaot taem yu kakae wan fis we hemi gat posen insaed long bodi blong hem from hemi stap kakae ol nara smol fis we i stap kakae ol smolmol plant (phytoplankton) we oli stap long ol korel rif. I gat sam pikja long en blong seksen ia we oli yusum blong mekem ol komiuniti i luksave ciguatera long ol aelan blong Pasifik.

**Community rule:** wan rul (we i klosap olsem wan rul we gavman i putum) we komiuniti i disaed long hem, mo oli agri long hem mo fising komiuniti i mekem sua se olgeta i folem.

**Community-based ecosystem approach to fisheries management (CEAFM):** manejmen blong fiseris insaed long wan ekosistem (we i inkludim ol fisa, ol fis mo ol ples we oli stap long hem) we wan lokol komiuniti i wokem wetem gavman mo eni nara oganaesesen. Hemi inkludim manejmen blong ol aktiviti long so (olsem agrikalja mo fam) we i afektem envaeromen blong solwota.

**Community-based fisheries management (CBFM):** long wei we wan komiuniti i tekem responsibiliti, plante taem wetem help blong gavman o wan NGO, blong manejem envaeromen blong kos wetem fiseris blong hem.

**Customary marine tenure (CMT):** wei we ol stret man ples oli kontrolem graon, solwota mo ol risos we hemi stap long saed blong loa o kastom mo tru long praktis.

**Destructive fishing:** Ol fasin blong fising we i spolem ol populesen blong fis (olsem, taem we fis i kam wanples o oli kam tugeta blong putum eg) o i spolem envaeromen (olsem, oli brekem korel blong kasem ol smol fis mo blong yusum ol posen o danamaet blong kasem fis).

**Ecosystem:** wan sistem we i gat ol plant mo ol animol (inkludim ol man) insaed long hem we oli wok tugeta mo wetem ol samting long envaeromen we i no laef.

**Eggs:** ol smolmol samting we wan woman animol i produsim, we i save develop ikam ol niu animol taem wan man animol i putum melek blong hem (sperm) long olgeta. Fish reserve (no-take area): wan eria we ol pipol i no save tekem fis aot long hem (wan tabu eria)

**Food web:** ol relebensip long saed blong kakae we i konektem ol plant mo animol

**Habitat:** stret hom blong wan animol olsem fis o natalae.

**Hookah:** wan tul we i pusum ea i go long ol pipol we oli daeva anda long wota be oli no yusum SCUBA.

**Juvenile:** yangfala blong wan spisis we hemi no save mekem pikinini yet.

**Key habitats (or critical habitats):** ol ples we wan spisis i laef long hem we i impoten tumas long saekol blong laef blong hem, long saed blong ol fiseris maet i inkludim ol eria we ol smol animol i stap gru long hem mo ol eria blong putum eg, olsem ol maot blong riva, ol natong-tong, ol eria blong si gras mo ol rif.

**Larva (plural larvae; pronounced lar-vee):** Long ol spisis blong solwota, plante taem hemi ol smolmol animol we i stap flot bitwin long taem we hemi eg mo taem we hemi kam yangfala o pikinini.

**Managed area:** eria we i gat insaed long hem ol risos we oli manejem, plante taem wan kastom eria we lokol komiuniti o maet ikat bitim wan komiuniti i kontrolem long wan smol fasin.

**Marine Protected Area (MPA):** wan eria blong solwota we oli protektem hem, we wan loa o wan nara strong toktok i blokem hem olsem wan fasin blong help blong presevem mo protektem impoten daevesiti, risos mo ples we ol animol i laef long hem long solwota; hamas blong help ia i stap i dipen long hamas ol pipol i save



yusum eria ia. Long fasin ia maet ol otoriti i save kontrolem o maet oli save blokem blong ol man i no fis long sam pat o long ful eria blong MPA ia. Long sam kaontri blong Pasifik oli yusum toktok ia long wan wei we i no stret gudwan blong tokbaot wan eria we i tabu blong fis long hem.

**No-take area (o fish reserve):** wan eria we ol pipol i no save fis insaed long hem, wan tabu eria.

**Overexploitation o overfishing:** blong kasem wan hae namba blong ol animol blong solwota (we i inkludim fis, natalae, krab mo nara animol) we i no sastenebol, minim se, sapos oli gohed blong fis, ol namba we oli kasem bae i go daon sloso.

**Pollution:** fasin we ol man oli putum i go insaed long solwota eni kaen samting we hem i save spolem envaeromen blong solwota. Maet olgeta i save se oli mekem olsem, maet oli no save.

**Scientific name:** nem blong wan spisis we i sem mak long ol kaontri mo long ol lanwis we ol man blong saens i yusum. Nem ia i gat tu pat. Fas pat hemi nem blong genus (wan grup blong wanwan kaen plant o animol we i gat sam samting i sem mak long olgeta). Namba tu nem hemi nem blong spisis (wanwan plant o animol insaed long genus we oli gat plante samting we i sem mak). Blong givim wan eksampol, white teatfish, *Holothuria fuscogilva*, mo black teatfish, *Holothuria whitmaei*, oli klosap sem mak minim se tufala i save stap long sem genus, be i gat inaf samting we i difren blong luk long olgeta olsem tu difren spisis.

**SCUBA:** wan kaen tul blong daeva andanit long solwota we ol pat blong hem i stap wanples. I gat wan botel o tang blong ea, wan samting blong kontrolem hem mo wan pat we i go insaed long maot olsem wan aqualung.

**Spawning aggregation:** wan grup blong wan sem kaen fis o animol, we plante blong olgeta oli kam wan ples, we i no sem mak long evri taem, blong stret pepos blong mekem pikinini. Plante long ol aggregation oli stap long sem ples mo long sem taem long evri yia. Namba wan eksampol hemi sam kaen los mo snapa fis. Be plante kaen poketnaef fis, blufis mo napoleon olgeta tu oli go tugeta long taem blong mekem pikinini.

**Spawning site:** Ples we wan spisis i go tugeta long wan spawning aggregation.

**Spawning:** fasin blong kapsaetem eg blong wan woman fis mo melek blong wan man fis.

**Species:** wan grup blong ol samting we i laef. Olgeta i stap sem mak long plante wei mo oli save mekem pikinini tugeta.

**Sperm:** wan kaen samting olsem melek we ol man animol i save kapsaetem we i save mekem ol eg blong ol woman animol i stap gru.

**Subsistence fishery:** wan fiseris we olgeta famli blong ol fisa mo ol memba blong komiuniti oli seremaot mo kakae ol fis be oli no salem olgeta.

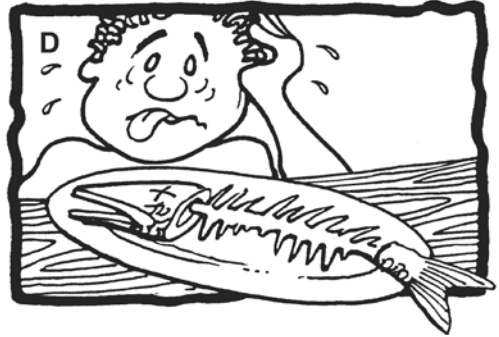
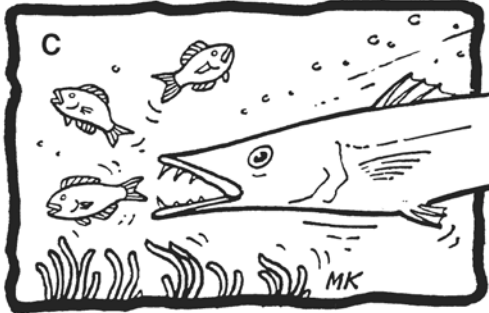
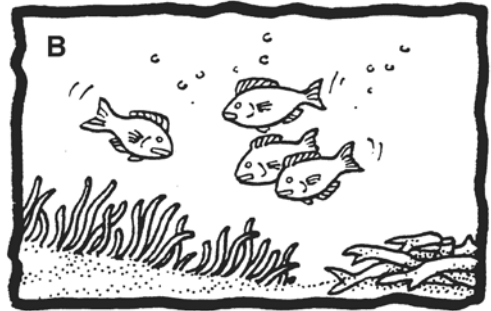
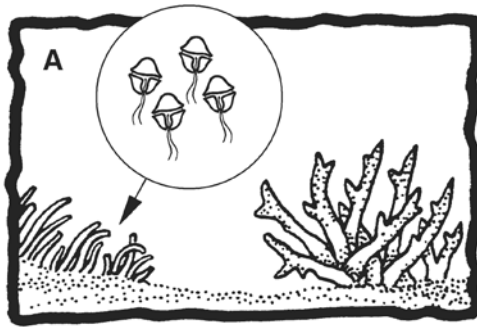
**Sustainable:** samting (long ples ia fising) we i save gohed mo i no save finis.

**Underwater breathing apparatus:** wan tul, olsem SCUBA o Hookah, we i letem wan man i pulum win o gas taem hemi stap andanit long wota.

**Wetlands:** ol eria we i stap daon, long graon we taed i save kavremap olgeta mo maet oli gat wota we i stap antap long olgeta o maet wota i go tru long olgeta. Ol eksampol i inkludim ol wet graon we i gat sol long hem, ol swam we i stap long kos mo ol fores blong natongtong.



## Hao ol iven i go taem wan man i gat posen blong ciguatera:



**A. Wan smolsmol plant** (nem blong hem dinoflagellate) i gru olsem wan nalulum long korel o si gras. Long evri taem i no gat plante tumas blong plant ia, be ol namba blong hem i save go antap bigwan taem i gat ol gudfala nutrien we i save yusum. Ol nutrien oli go antap long ol taem we i gat plante ren i foldaon mo i ran from graon i go long solwota mo long taem blong saeklon taem ol nutrien i kamaot long ol laen blong so mo ol rif taem saeklon i damejem olgeta. Nutrien i save go antap tu taem sitsit blong man o fetalaesa blong agrikalja i go insaed long ol wota blong kos.

- B. Ol smol fis i kakae** ol smolsmol plant we oli gat posen long olgeta.
- C. Ol fis we i mo bigwan oli kakae** ol smolsmol fis minim se posen i kam bigwan long sam long ol bigfala fis.
- D. Olgeta pipol we oli kakae fis** ia oli gat ol problem olsem oli harem se skin i muvmuv smol, bodi i haf ded, mit i stap soa, mo i gat wan difren kaen fasin we oli harem se wan kol samting i hot taem hemi tajem, mo wan hot samting, man i save ded from, from hemi no save gohed blong pulum win.



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