



VAEGA O FAIGAFAIVA

Fisheries Division

P.O. BOX 1874, Apia, Samoa, Tel: (685) 20369, 20005
Fax: (685) 24292, Website: www.maf.gov.ws

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foreword

Avea ia lenei lomiga e tauala atu ai se faamalō ma le faafetai tele i tautai o Samoa faapea paaga uma a le Vaega o Faigafaiava o loo fitāituga i le atina'eina o le tamaoiga o Samoa aemaise o le faaauau pea ona maua le fofoga taumafa o tagata lautele. I lenei lomiga o loo faailoa ai taumafaiga a le Matagaluega e unaia nisi o faamoemoega autu ma fua-fuaga mamao a le Malo mo taumafa maua pea. O le auai o pulega mamalu a Alii ma Faipule i le faia o Taiala ma pulega lelei mo atina'e faasao o i'a ma figota ua tosina mai ai nisi faalapotopotoga e lagoonago ma faaleleia e pei o le Sytel Company mai Peretania. Ua fesoasoani mai foi nisi afioaga i le taofia lea o fefaatauaiga faasolitulafono e pei o le fagotaina faapisinisi o fugafuga.

Sa feagai foi lau Vaega o Faigafaiava ma le suesueina o

aafiaga o le afā o Evan e pei ona afea ai afioaga ma faatoaga tilapia ma atina'e faisua na afaina. O le a fofoga pea lo outou mamalu i fua-fuaga faagasolo a le Malo ma le Matagaluega. Ua maituina i lenei kuata le faaitiitia o i'a o le tuna mo fefaatauaiga pe a faatusa atu i le kuata ua tuana'i atu (Oketopa-Tesema 2012). E afua mai ona ua tuai ona maua faamaumauga o le masina o Mati ae ua tapena le tatou Nusipepa mo le faailoaina.

Peitai o le vaitausaga tonu lenei e lelei ai le tai i'a ma e tatau ona tele ai ni i'a maua mo fefaatauaiga.

la manuia tele lau faitau!!!

I take the opportunity of this Issue to congratulate the fishers and stakeholders who have worked tirelessly to promote the economy and food security of Samoa through ongoing and sustainable fishing. This issue highlights the continue efforts by your Fisheries Division to promote these goals through innovative and strategic fisheries development which

are inline with the Government priorities.

The entire participation of village council in promoting community fish reserves program has been acknowledged and therefore drives attention of the Sytel Company from the UK to support and strengthen this initiative. Also village councils have assisted in investigations of unlawful fishing of sea cucumber for export purpose.

Your Fisheries Division also completed an Impact assessment of damage made by Cyclone Evan and we will inform you on the progress of future plans by the Government and your Ministry.

Last but not the least, the decrease in our tuna longline export figures within this period compared to the last quarter (Oct-Dec 2012) was due to the unavailability of our data collected in March. However it is expected that the upcoming on

peak season for tuna (usually towards mid-year and towards end-year), will land increased amounts of fish catch, all in all contributing to increase fish exports based on demands.

Happy reading everyone!!!

Inside this issue:

Coastal Fisheries Assets Damaged and Lost by Cyclone	2
Tilapia Farms Summary Report for Cyclone Evan	3
How to Determine the Age of a Reef Fish?	4
Feiloa'i Lepuiaitai, Manono ma le Pule Sili o le Sytel	5
Suesuega i le Fagotaina o le Fugafuga	6
Auala e te Silafia ai le Matua o le i'a	7
Auai Salamumu i le Polokalame Faasao	8

Lepuiaitai Village welcomed Sytel Company Limited's CEO

by: Tauaefā Autalavou

The Chief Executive Officer of the Sytel Company Limited, Mr Michael McKinlay and his partner came all the way from the United Kingdom to spent two days (7-8 March) with the village of Lepuiaitai Manono-tai. The visit was objectively looking at the fisheries activities and achievements funded by the company under the Lepuiaitai fisheries management and development project. The project has assisted in the establishment of a



Sytel Company CEO Mr. Michael McKinlay and his partner.

fish reserve area to allow fish and invertebrates to breed, restocking of trochus, farming of giant clams and sea grapes in cages. Furthermore, the village conducted coral replanting and built artificial reef structures as part of reef rehabilitation program. Other activities included the collecting of crown of thorn starfish, cleaning and replanting of the shoreline to prevent soil erosion and pollution.

Lepuiai Village welcomed Sytel Company Limited's CEO

from page 1

Sytel Limited is a software company based in the United Kingdom and the Lepuiai village has established a partnership agreement to empower and strengthen community ownership and participation in managing and conservation of their marine resources. The Company has devoted a proportion of its annual profits to supporting fisheries resources conservation and develop direct benefits to the people of Lepuiai and other neighboring villages of Manono island.

Mr McKinlay was officially welcomed by the council of chiefs of Lepuiai in the traditional kava ceremony, followed by the village re-

marks addressing the kind assistance provided by Sytel. The village representatives, Mr Leiataua Lotu and Leota Tini also highlighted the importance of their Village Fisheries Management Plans as well as their village bylaws and the respective support shown by the island of Manono.

"Your visit today Michael has empowered our relationship and our commitment in fisheries resource management, we thank you very much and may God bless your company" added Leota Tini.

The Sytel CEO was very delighted and concluded that their partnership with Lepuiai village will be extended

due to the successful outcome of the project and also acknowledged the input of the Fisheries Division in technical assistance provided. Michael and his partner returned home with unforgettable memories and hospitality provided by the people of Lepuiai village.



Lepuiai-tai village council.

FISHERIES DIVISION CONDUCTED AN ASSESSMENT OF COASTAL FISHERIES ASSETS DAMAGED AND LOST BY CYCLONE EVANS

by: Ulusapeti Tiitii

The first week of gearing up for this New Year's work, representatives from all sectors were invited to participate in a training workshop conducted by the World Bank consultants. Thus training was an opportunity for the consultants' assistance in defining and financing economic recovery and reconstruction programs after the cyclone Evans. The training's aim was to define the extent of post-disaster programs where the World Bank utilized the methodology for disaster damage and loss assessment (DaLA) initially developed by the United Nations Economic Commission for Latin America and the Caribbean (UN-ECLAC) for this purpose.

The consultants also urged all sectors to conduct this survey in a period of two days, and another two days to tabulate, analyze data and reporting. For Fisheries Division, we conducted this survey at the most impacted areas which were covered under the Fisheries Socio-Economic Survey 2012 with only 2% of the total number of fishers in the district. The questionnaires were based on the gapped information that is needed for this assessment as most of other information was obtained from our baseline data already collected previously. A total of 27 Fisheries staff involved to cover seven most impacted districts such as Manono, Falelatai,

Lefaga, Safata, Siumu, Falealili and Vaimauga on Friday 11th and Saturday 12th January 2013 and collected data from 81 fishers.

The estimation of fisheries assets damaged and losses by the cyclone will be used by the World Bank to calculate recovery costs for fisheries assets that were damaged and determine the rate of support that they would be given to the Government of Samoa for reconstructions of these damages and recovery of the losses by the natural disaster.

Thus report is not yet published; therefore, the total cost of damages and losses for fisheries assets would be released once finalized.

Tilapia Farms Summary Report for Cyclone Evans Damage and Loss Assessment

by: Maria. Sesilia Luamanuvae



The Fisheries Division conducted its damage and loss assessment for tilapia ponds on the 18th December 2012 and the 13th January 2013. About twenty eight farms were surveyed with a total of 59 tilapia ponds (17 earthen ponds & 42 cement ponds). The severely damaged ponds were those located at the most affected areas of Upolu Island mainly Vailele, Falease'ela, Lotofagā and Salani. A total of

11 ponds were severely damaged with an overall value of \$16,700.00. The replacement cost of all physical assets was estimated at \$18,395.00. Labour costs for replacing and repairing of these damaged assets is estimated at \$11,250.00. Additionally fish mortality recorded for all affected ponds is 2415 (fry/fingerlings/brooders) costing up to \$2,161.30.

Cyclone Evans not only destroyed ponds but also affected fish consumption for 15% of families surveyed who depends on tilapia farms as an alternative source of protein.

Giant clam nurseries

Of the twenty two nurseries under the FD monitoring and sampling program only three were partial damaged during Cyclone Evans ordeal, the estimated cost for repairing of these physical assets is \$1,500.00. There were also dead clams, about 81 were found at different sites with total value of \$208.00. Damages in Giant Clams nurseries are minute compared to tilapia ponds as a result of this tropical cyclone.

Investigation for the Harvesting of Sea Cucumber 'Bech-de-mer' at the Village of Saanapu.

by: Ameto Kalolo

According to Section 3 (1) of the Fisheries Act 1988, it is stated the purposes of the Act is to promote the conservation, management and development of the fisheries of Samoa, promote the exploration of the living resources of the fishery waters, and to promote the protection and preservation of marine environment; these fisheries conservation, management and development is used to protect our marine living resources from exist to harvesting and destroying by our people.

The Compliance Unit were investigated a matter where 'bech-de-mer' or Sea cucumber was harvested for commercial in the village of Sa'anapu. This was reported in March, by some of the village mem-

bers to the Fisheries Division, before investigation conducted. These reporters understand that this fishing practice is illegal and the village had already known that this kind of fishing is very harmful to the marine living resources. According to the scientist's facts, if these marine living resources had been harvested for commercial it will be disappeared and this is why we conserved the living resources from harvesting for our children in the future.

At the meantime, the matai of Sa'anapu village banned this kind of fishing activity and the Compliance Unit is still looking for the owner of the processing plant where these items were processed for commercial purpose. According to the investiga-

tion been carried out by the Authorized Officers of the Compliance Unit, they didn't even find out who is responsible for the exporting of the sea cucumber commercially due to those who had interviewed at the time of the investigation and they said, "they have no idea who is responsible for this matter". The investigation for this case has been closed until any further notification from the public about the matter and then the case will be continued.

We advice the public to stop harvesting of sea cucumber (*bech-de-mer*) for commercial export because it will make this species disappeared and most of our people depends on our marine living resources for food and for living.

How to determine the age of a reef fish?

by: Maria F Sapatu

Understanding and obtaining information on the biology of reef fish is of great assistance in better management and conservation measures of finfish. Aging of reef fish is one of the vital biological information; which is determined with the use of the otoliths extracted from a finfish. This procedure was the main objective of a training that was conducted in New Caledonia on the 11th-22nd March 2013 where one staff of Fisheries Division attended. The training was funded by Secretariat of the Pacific Community (SPC) with resource people from SPC and Institute of Research and Development of New Caledonia.

An otolith is known as the fish ear bone (described as a bone but it's a crystal not bone) located beneath



Top: Otolith sample
Bottom: Thin cross section cut of an otolith showing its dark white bands

the fish brain cavity. A thin cross section cut of an otolith has visible dark rings that are somewhat similar to rings of a cut tree trunk. The number of these dark rings within an otolith coincides with the age of the fish.

Before extraction of the otolith, other characteristics of the fish are to be documented. These characteristics would assist in back calculating the growth of the fish once its age is known. These are the:

- Species Name
- Length and weight of fish
- Female or Male and its maturity
- Habitat or Location where the fish was caught

With such understanding Fisheries Division plan to conduct such research work in the coming future in order to identify better management measures such as better size regulation for specific fish species and actual period and location of aggregation for certain species for seasonal ban.

Tuna Exports to Overseas Markets: Jan-Feb 2013

by: Dimary U Stowers

Fish exports for the months of January and February have generated a total value of \$635,580.00 SAT. This exclusively comprised of 89.84 metric tonnes of frozen albacore exported to the cannery in American Samoa. Delay in export data records for the month of March has led to the de-

creased amount presented for this quarter, as compared to last quarter's (Oct-Dec 2012) 134.26 metric tonnes of fish exported to various markets overseas. Nevertheless, exports from January and February have contributed an impressive amount to the economy and it is with expectation

that the upcoming on peak season for tuna (usually towards mid-year and towards end-year), will land increased amounts of fish catch, all in all contributing to increase fish exports based on demands.

Tuna Exports: Jan-Feb 2013

Month	Tuna Species	Destination	Weight (MT)	Value (SAT)
January	Albacore (frozen)	American Samoa	59.89	\$ 423, 720.00
February	Albacore (frozen)	American Samoa	29.95	\$ 211, 860.00
TOTAL			89.84	\$ 635, 580.00

Feiloa'i Lepuia'i-tai Manono ma le Pule Sili o le Sytel

tusia: Autalavou Tauaefa

O le alii Pule Sili o le Kamupani o le Sytel, susuga Michael McKinlay ma lana paaga na malaga mamao mai lava i Peretania ma asiasi atu i le afoaga o Lepuia'i Manono mo aso e lua (aso 7 & 8 o Mati). O le autu o le faigamalaga o le asiasialea o galuega faatino sa faatupeina mai e lenei kamupani i le polokalame o le Puleaina tatau ma le atina'eina o faigafaiva i le afoaga o Lepuia'i-tai. O lenei fesoasoani e aofia ai le makaina o le Vaega Faasao ina ia avefaanofoaga e nonofo ma fananau ai i'a ma figota, faateleina aliao ma faisua, ma le tausia o le limu fua-fua i totonu o pa. Sa faatinoaina foi e le afoaga le toe totoina o amu ma le fauina o fale-amu ina ia faaleleia ai vaega e nonofo ai i'a. O isi galuega e iai le aoina ma le tanuina o alamea, faapea le totoina o le apitagalu e puipuia ma taofia mai ai le palapala tafia ma filogia ai le suasami.

O le Sytel Limited o se kamupani e gaosia masini faapitoa i Peretania, sa osia se maliega faapaaga ma le afoaga o Lepuia'i Manono e faamalosia ma unaia ai le afoaga e faasao, pulea ma faaaogaina tatau aemaise le atina'eina o faigafaiva i le aloalo. O se vaega o le tupe maua faasili a lenei kamupani ua ofoina mai e fesoasoani ma lagolago i le afoaga i polokalame faasao ma le faia o atina'e e faaleleia ai le gataifale ma manuia ai tagata lautele aemaise isi afoaga o le motu o Manono.

Sa feiloai atu le susuga ia McKinlay i le pulega a alii ma faipule ma le afoaga o Lepuia'i e ala i le ava o le feiloaiga, ona sosoo lea ma folasaga a sui o le afoaga e faailoa atina'e ma galuega sa faatupeina mai le fesoasoani a le Sytel. O le susuga Leiataua Lotu ma Leota Kini sa faamatalaina foi le taua o le tusi Taiala o le Pule

tatau o le gataifale, o tulafono a le afoaga aemaise foi o le lago-lagoina e isi afoaga o le motu o Manono o le latou faasao. "O lou asiasi mai Michael, ua matua malosi ai le tatou faigapaaga ma mautu ai lo matou naunautaiga e pulea ma faasao le matou gataifale, e momoli atu ai le matou faafetai tele, ma ia faamanuia le Atua i lau pisinisi", o le suanoaga lea a Leota Tini.

Sa matua faamalieina lava le Pule Sili i atina'e ma galuega faatino o le polokalame ma faailoa ai le faaauuina pea o le fesoasoani a le Sytel e faatupeina isi atina'e mo Lepuia'i, ma ia faafetaia ai foi le Vaega o Faigafaiva i auunaga faapitoa ua ofoina mo le afoaga. Ua toe taliu atu le faigamalaga a Michael ma lana paaga ma moli-mau faagalogatā ona o le tali malo ma le laufofoga fiafia o le afoaga o Lepuia'i Manono-tai.



Pule Sili o le Sytel i luma o le laupapa faailoilo.



Mr & Mrs Mckinlay ma sui o le afoaga.

Aotelega o Suesuega i Aafiaga o Fa'atoaga Tilapia i le Afa o Eveni.

M. Satoa, T. Itagia & F. Samuolu



Faatoaga tilapia sa faaleagaina i le afa o Eveni.

Sa faatinoina e le Ofisa o Faigafaiva se sailiiliga i faatoaga tilapia sa faaleagaina i le afa o Eveni, i le aso 18 Tesema 2012 ma le 13 Ianuari, 2013. E 59 fa'atanoa tilapia (17 fa'atanoa palapala/42 fa'atanoa simā) mai i faifa'atoaga e 28 sa suesueina. O le tele o

fa'atoaga sa maitauina le matua fa'aleagaina e aofia ai afioaga nei o Upolu; Vailele, Falease'ela, Lotofagā ma Salani. E 11 fa'atanoa tilapia sa matua aafia ma e tusa lona faatupeina ma le \$16,700.00. O le tau aofa'i e toe faaleleia ai nei aseta e tusa ma le \$18,395.00 ae o le totogi mo tagata faigaluega aua le fausiaina ma le faaleleia e tusa ma le \$11,250.00. Sa lipotia le 2,415 o tilapia pepe, e tusa le tau ma le \$2,161.30.

O aafiaga o le afa o Eveni e le gata i faatanoa tilapia, ae faapea fo'i i le fofoga taumafa o le 15% o aiga sa faamoemoe i lea atina'e.

Nofoaga faasao mo faisua

E 20 nofoaga faasao mo faisua e mata'ituina pea e le Ofisa o Faigafaiva i ana polokalame faifaipa, mai i lea aofa'i e 3 sa lipotia le a'afia i le afa o Eveni; e tusa ma le \$1,500.00 le tau mo le toe faaleleia o nei aseta. Sa faamauina le 81 o faisua pepe mai i nofoaga faasao ma e tusa lo latou faatupeina ma le \$208.00. E itiiti lava se aafiaga o le afa o Eveni i nofoaga faasao mo faisua pe a faatusatusa atu i faatoaga tilapia.

Suesuega i le Fagotaina o le Fugafuga ma Maisu i le Afi'oaga o Saanapu.

tusia: Ameto Kalolo

I lalo o le Tulafono Autu o Faigafaiva 1988, i le vaega 3 (1), o loo faapea mai ai, o le naunautaiga lava o le faia o le tulafono ina ia mataituina ai le puipuia, vaaia ma le ola lelei o le siosiomaga ma meaola o loo faapena ona ola i ogasami o Samoa mai i le fa'aleagaina ma le soona fa'atamaia e o tatou tagata.

Mai se lipoti na tuuina mai i le Ofisa o Faigafaiva i le Masina o Mati, na taua mai ai o loo faapena ona aoina pe fagotaina e tagata o le afioaga o Sa'anapu le figota lea o le fugafuga ma le maisu mo le faatauina atu. Na ripotia mai e i latou o loo malamalama i le tulafono e fa'asaina ai ona toe aoina ia figota o le sami mo faatauaiga faa-pisinisi. I le mau fa'a-

saienisi, afai ae soona fagotaina nei figota o le sami, o le a umi foi se taimi e toe fa'atamaoigaina ai o tatou gataifale, i nei punaoa pe a faaleagaina i faigafaiva le talafeagai nei. E le gata i lea o le aafiaga foi lea o alo ma fanau lalovaoa a si o tatou atunuu i le lumanai ma le tausiga o aiga o loo faalagolago i taumafa mai le sami mo aso uma.

Sa oo atu le Vaega o Tulafono a le Vaega o Faigafaiva i le aso 13 & 14 Mati, e faatautaia se suesuega i lea mataupu i le afi'oaga o Saanapu ina ua maua mai ai se ripoti e i ai ni faifaiva mai lea afi'oaga o loo latou faatinoina lea tulaga. Ma o le taimi nei ua taofia nei suesuega o lenei

mataupu, se ia toe maua mai nisi faamatalaga mai lenei lava mataupu ona toe fa'aauau ai lea o suesuega a le Vaega o Tulafono. I le taimi lenei, ua matua fa'asaina lava e Alii ma Faipule o le afioaga o Sa'anapu ona toe fagotaina le fugafuga ma le maisu mai o latou gataifale mo faatauaiga fa'a-pisinisi.



Fugafuga

Auala e te silafia ai le matua o le I'a aau

tusia: Maria F Sapatu

O le malamalamaaga ma ni faamaumauga i le ola faanatura o le I'a aau e taua tele aua e fesoasoani i le faavaeina o ni taiala talafeagai mo le puleaina ma le vaaia lelei o I'a o le gataifale latamai. O se tasi o nei faamaumauga o le suesueina lea o le matua o le I'a e faaoga ai le ponaivi o le taliga o le I'a. O lenei metotia o se tasi o auga ma le faamoemoe o se aoaoga sa faatinoina i Niu Kaletonia i le aso 11-22 Mati 2013 lea sa auai atu ai se sui o le Ofisa o Faigafaiva. Sa faatupeina lenei aoaoga e le Ofisa Faafailautusi o le Pasefika (SPC) faatasi ma faiaoga mai lenei ofisa ma le ofisa suesue a Niu Kaletonia.



*Ata i luga: Ata faataitai o le ponaivi taliga o le I'a
Ata i lalo: Fologa vaaia o totonu o le ponaivi taliga o le I'a pe a tipina lea e faailoa atu ai lio matilatila lanu papa'e*

O le ponaivi o le taliga o le I'a e i ai ni faailoga e pei o ni lio matilatila e tai tusua ma foliga vaaia i totonu o se

ogalaau pe afai e tatuu se laau. O le aofai o nei lio e vaaia i totonu o le ponaivi taliga o le I'a o le aofai foi lea o le tausaga o le I'a.

E iai ni faamaumauga e tatau ona faamauina ae lei aveeseina lenei ponaivi mai le I'a mo suesuega. O nei faamaumauga e faaoga mulimuli mo le suesueina o le ola tuputupu ae o le I'a mai le vaitaimi o laititi i le vaitaimi lea na fagotaina ai, po o lona matua na fagotaina. O nei faamaumauga e i ai le:

- Igoa po o le ituaiga I'a
- Umi ma le mamafa o le I'a
- Tane po o le Fafine le ituaiga I'a
- Nofoaga sa fagotaina mai ai le I'a

O lenei aoaoga ua iloga ai le taua tele o nei faamaumauga ma ua manatu ai le Ofisa o Faigafaiva e faatino se suesuega faapenei i se taimi i le lumanai aua le faaleleia lea o taiala mo le puleaina ma le vaaia lelei o I'a i le gataifale latamai.

Village Six Months Review Results

Junior T Selesese

A total of eighteen (18) Villages under the Community Based Fisheries Management Plan (CBFMP) were reviewed in this quarter January - March 2013. Fisheries Advisory Section conducted this procedure in every six months to evaluate village Management Plans. The main purpose is to assess village undertakings, not only to review village undertakings but also to investigate if villages responsible well of monitoring, enforced village rules to manage well their marine resources and other fisheries developments in their village fish reserve. The village FMC discuss with the Fisheries staff as the review is being held based on the well organized quantitative questionnaire by Fisheries Division. To determine the appropriate scores, all forms were entering into the computer database. The table below had shown all results of village Management Plan Reviews. The table shows that 7 villages reach above 85%, which is an excellent performance and commitment. Some villages with low scores of below 70% still trying to catch up due to cyclone Evan as a major trouble as well as few problems for them and now the Fisheries Division is assisting and work together with them through technical advises to encourage and enforced their undertakings.

	Village	Review date	Score %
1	Sapini i Faga	18-Jan-13	82.12
2	Sale Saipipi	23-Jan-13	82.13
3	Lefagaoalii	25-Jan-13	87.83
4	Vaisala	30-Jan-13	86.44
5	Lepuia'i Manono -Tai	12-Feb-13	90.02
6	Satafao	13-Feb-13	83.94
7	Luuva i Faga	14-Feb-13	78.81
8	Saasaai	15-Feb-13	63.92
9	Sapo'e Falealii	18-Feb-13	75.65
10	Vaovai Falealii	19-Feb-13	85.33
11	Salimu i Faga	27-Feb-13	87.11
12	Salani Falealii	27-Feb-13	81.52
13	Malae i Faga	28-Feb-13	86.83
14	Tafatafa Falealii	01-Mar-13	79
15	Foailalo	18-Mar-13	76.92
16	Satuiatua	19-Mar-13	78.77
17	Safaato'a Lefaga	20-Mar-13	82
18	Apolima-Uta	21-Mar-13	85.55

Table 1; shows the results of reviewed villages, Jan-March 2013.

