

SPC Regional Terrestrial
and Aquatic Animal Disease
Reporting Workshop



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SUMMARY REPORT FOR PACREIP (PACIFIC ISLANDS FORUM SECRETARIAT)

SPC Regional Terrestrial and Aquatic Animal Disease Reporting Workshop

Date: 21–25 June 2010

Venue: Novotel International Hotel, Nadi, Fiji

Collaborating agencies: Pacific Islands Forum Secretariat (PIFS)
European Union (EU) through PIFS
Coral Reef Initiatives for the Pacific
Secretariat of the Pacific Community (SPC)
Network of Aquaculture Centres of Asia-Pacific (NACA)
Walt Smith International Inc.

1. Executive summary

By the close of this second of two SPC Workshops on Terrestrial and Aquatic Animal Health Reporting by Pacific Island Countries and Territories (PICTs) held 21–25 June 2010 (the first Workshop was held in April 2009), first-time submissions to the World Organisation for Animal Health (OIE) of six-monthly and annual reports using the online WAHIS system have now been made by seven of the eight PICTs represented at the second workshop. The seven, whose reports were for the 2008 reporting period, are the Federated States of Micronesia (FSM), Fiji, Kiribati, Samoa, Solomon Islands, Tonga and Vanuatu. Papua New Guinea (PNG) representatives prepared reports for 2008 which are now ready for on-line submission, and these were “saved as draft” in the on-line World Animal Health Information System (WAHIS) for final checking by their country’s OIE Delegate. Reports have also been lodged for 2009 by four of these eight countries – FSM, Samoa, Tonga and Vanuatu.

The national participants who attended this second workshop identified various recommendations which they endorsed for follow-up action and adoption at national or regional level as appropriate, to strengthen capacity to lodge and regularly update animal health reports to OIE using WAHIS.

2. Overview

Pacific Island countries and territories (PICTs) will be able to continue exports of marine ornamental products to the European Union (EU), conditional upon improving their reporting on the status of terrestrial and aquatic animal health in the region to OIE. A general lack of animal health reporting capacity had recently become a specific trade facilitation issue affecting the Pacific region’s export trade in marine ornamental aquatic species worth approximately US\$20 million annually. In 2009,

the EU introduced new legislation requiring competent authorities of countries exporting live ornamental fish to the EU to meet particular reporting requirements, including mandatory country membership of the OIE. At present, Fiji, Vanuatu, Papua New Guinea, FSM and New Caledonia are the only Pacific Island members of OIE apart from Australia and New Zealand.

The Secretariat of the Pacific Community (SPC) successfully negotiated with the EU to maintain this trade opportunity, with the result that SPC member countries need not now be OIE members in order to export marine ornamentals to the EU. However, the EU's agreement is conditional on these PICTs meeting the terrestrial and aquatic animal health reporting requirements of OIE.

OIE's web-based World Animal Health Information System (WAHIS) is the standard system for reporting a country's terrestrial and aquatic animal health status. This workshop on using WAHIS and animal health reporting procedures was organised for relevant fisheries, quarantine and animal health staff. The main intention was to ensure that countries currently exporting aquatic ornamentals are able to comply with OIE reporting procedures and can make regular reports. WAHIS training allows PICTs to demonstrate their animal health status in regard to their potential terrestrial and aquatic, live animals and livestock export products.

The workshop also provided an opportunity to discuss the possible scope and functions of regional animal health information systems, specifically for the Pacific Islands region, to pinpoint constraints in implementing systems like WAHIS or the Transboundary Animal Disease Information System (TADinfo) in Pacific island countries, and to develop strategies to address these constraints.

This workshop follows on from the first training on WAHIS, conducted for a number of PICTs in April 2009 by SPC in association with OIE and FAO. Subsequent follow-up had shown that additional work is required to strengthen countries' ability to comply with reporting requirements, and to operate WAHIS. The follow-up training provided an opportunity for non-OIE SPC member countries to participate in the OIE information network for terrestrial and aquatic animal health.

Training was coordinated by SPC's Animal Health and Production team in collaboration with the Aquaculture Section of the SPC Fisheries, Aquaculture and Marine Environments division, with funding from the EU through the Pacific Islands Forum Secretariat, and from the Coral Reef Initiative for the South Pacific.

3. Workshop opening and objectives

The workshop was opened by Dr Ken Cokanasiga (SPC) who welcomed participants to Fiji and offered a very warm welcome to visiting Terrestrial and Aquatic Health Specialists from the PICTs and distinguished guests Dr Eduardo Leaña (Network of Aquaculture Centres of Asia-Pacific, Bangkok) and Walt Smith from Walt Smith International Inc. Dr Tim Pickering (SPC) spoke on behalf of Dr Dale Hamilton (PIFS), who sent his apologies, to highlight the importance of animal health reporting to facilitate international trade from the Pacific region.

Chief Guest Speaker Walt Smith presented an overview of the marine ornamental trade in the Pacific, with a summary of the commodities traded, their value, and the main markets, among which the EU is significant. He stressed that rural livelihood opportunities are being created in the Pacific by the close involvement and partnerships of companies like his with rural communities. For these opportunities to be maintained, it is important that PICTs complies with any necessary requirements for continued access to overseas markets for our marine products.

Dr Tim Pickering followed with an update about the outcomes of SPC advocacy to EU on behalf of SPC member countries, and the roles that would need to be adopted in terms of international expectations that animal health status be visible in order for trade to continue to flourish. He concluded by outlining the workshop's key aims:

- provide an overview and practical training in the use of WAHIS;
- facilitate the development of disease reporting systems in non-OIE member countries (for both terrestrial and aquatic animal commodities, including ornamental fish);
- assist those PICTs who have not yet lodged a report for terrestrial and aquatic animal commodities to lodge a first report;
- provide information on the implications of EU legislative amendments for countries that export ornamental fish to the EU;
- increase awareness of the risks of aquatic disease likely to have implications for international trade in marine ornamental fish from the Pacific.

4. Country reports on marine ornamental industries, national policies, and animal health reporting status

Participants described animal disease reporting in each country/territory, in particular:

- whether an industry exporting marine ornamental fish to EU exists
- current capacity for reporting animal health status:
 - government agency(ies) responsible for investigating and compiling reports on the occurrence of animal diseases;
 - internal mechanisms to collate aquatic animal health information for reporting;
 - any legislation that requires notification of serious animal diseases to a relevant government agency, and the list of notifiable diseases;
 - the specific information management system (paper-based or electronic) used to collate and record disease information;
 - the main constraints on timely and effective animal health reporting.

A general discussion to highlight any common issues across the region followed.

The complete Powerpoint presentations given by participants, and those of resource persons and other background documents, are appended to this report as electronic copies in a separate folder, and are also available from SPC (anjum@spc.int) on request. The main points that emerged from the presentations and subsequent discussion are summarised below.

Federated States of Micronesia

Legal jurisdictions span four states, Yap, Chuuk, Pohnpei, and Kosrae. Marine ornamental exports started in 2005, and the EU is a significant market. The relationship between jurisdictions can be complex – four states, plus a federal authority. There is no legislation specific to disease and reporting. The Federated States of Micronesia are already a member of OIE. They have in force a Quarantine Act 2006 FSM Code Title 22, and a Trust Territory Export Meat Inspection Act which focuses on human health export standards, but not biosecurity. The states need to develop specific legislation for this, and to enhance capacity and institutional arrangements. They lack a specific reporting protocol for animal health. An Animal Disease Suspect Report Form is in place, but no database. For surveillance they rely mainly on Extension Agents of the College of Micronesia Land Grant Programme to report on any new incidence. The legislation, “FSMC Title 23”, covers inshore fisheries and aquaculture, and could be relevant to reporting diseases. Department of Resource & Development is responsible for Animal Health and OIE reporting. Their 2008 OIE reports are already uploaded. The Government intends to form an Animal Health Committee. Risk Assessment training by FAO is underway for aquatic animal introductions and translocations. A Biosecurity Bill is currently under review.

Challenges in FSM include:

- no dedicated animal health service;
- no regulations or protocols or database for disease;
- need to develop staff guidelines for OIE compliance;
- need training and attachments of staff to SPC/OIE;
- need to expand the paravet programme to include aquatic animal diseases.

Fiji

Two private-sector national enterprises have a track record of exporting marine ornamental fish to EU, Walt Smith International Inc., and Aquarium Fish Fiji. The disease risk of such exports to EU is very low, because the OIE-listed diseases of concern to EU affect freshwater or coldwater fish species, and are not relevant to Pacific regional marine ornamental exports. In addition to the national-level reporting requirements now placed on competent authorities by EU, individual companies must also work hard to meet new EU certification standards for each shipment they send. In general Fiji has comparatively good capacity in terms of veterinarians and supporting infrastructure. Fiji is an OIE member and signatory for EU, and Fiji biosecurity is the national focal point. Both the National Veterinary Pathology Laboratory and the University of the South Pacific has PCR diagnostic capacity. Agencies with responsibility and/or capacity in animal health include Animal Health & Production Division (OIE Delegate, OIE Focal Point for Terrestrial and Aquatics), Biosecurity of Fiji Islands (Signatories for certification to EU), Department of Fisheries (repository of expertise in fish) and the University of the South Pacific (Marine Studies Programme, Institute of Marine Resources, and School of Agriculture). The process for notifications was clearly spelt out in repealed legislation, but was not as clear in current biosecurity legislation. On-going review and amendment may be needed to establish clear-cut demarcations in jurisdictions and roles. There is currently no process of animal health reporting for aquatic organisms, and the focus of reporting is on terrestrial livestock. Fiji's database and OIE reporting is all paper-based at present. Staff need training in on-line systems. Inter-departmental communications to collect and compile information for reporting is the biggest constraint at present. Sections with responsibilities are under-staffed and under-resourced. There is some confusion over new roles under the Biosecurity Bill. Any work that can be done to enhance clarity of roles, provide training and facilitate inter-agency communications will be very useful.

Kiribati

One company exports ornamental-size giant clams to EU and US, but is constrained by low-tech production methods and a shortage of air cargo space. In total, eight companies are based on Kiritimati Islands and two on Tarawa. They export live fish, mainly flame angel, lemon peel, emperor angel, Griffis angel and Gold Flake. These fish are shipped initially to Australia, Fiji or Hawaii for re-export to US or Europe. The Department of Agriculture is responsible for disease reporting, and no diseases have yet been detected. Reporting on animal health is paper-based. Preparedness and response plans are approved by Cabinet. Technical capacity is limited, and reporting is hindered by a geography of widely scattered islands with poor communication or transport links. Functioning computers for data entry are limited. Current capacity for reporting animal health status is consequently quite low. The Government relies upon a flow of information from the public to the Fisheries or Agriculture officers-in-charge, to the principal officer, and thence to the director, who then formulates measures and responses for Cabinet approval. No supporting legislation requires timely or effective reporting. There is a lack of local aquatic animal disease know-how, and aquatic diseases are not addressed in the Fisheries Act despite its recent revision.

Papua New Guinea

Currently, no live animals are exported to EU, and no live ornamental fish are exported anywhere, although PNG does have export potential, and feasibility studies are being conducted. The National Agriculture Quarantine and Inspection Authority is responsible for investigating and compiling

reports on animal disease occurrences (terrestrial and aquatic animal diseases). The relevant legislation is the Animal Disease and Control Act 1952, and the Animal Disease and Control Regulation 1955. PNG accepts the OIE listed diseases as notifiable. A new Biosecurity Bill is in the pipeline. PNG is a member of OIE. Animal health reports are both paper-based and electronic, and recorded in TADinfo as the national electronic animal disease database. A weekly, nation-wide reporting system (Provincial Animal Health Surveillance and Reporting System), using the District livestock officers as the “eyes & ears” is currently under trial. The main challenges are: timeliness of reporting, quality of reporting, costly testing and surveillance, lack of animal health focus in other relevant agencies, for example the National Fisheries Authority. Staff need more training in the use of TADinfo. Provincial livestock officers need more training on timely and quality reporting. PNG asks whether TADinfo can be linked to WAHIS for OIE reporting, thus avoiding the need for manual double-entry of animal health information. PNG has no information-collecting mechanisms for aquatic animal health as yet. The National Fisheries Authority certifies aquatic product exports to EU and US. Prawns are virus-tested in Australia, which is costly. No yellow head virus or white spot syndrome virus has yet been detected in cultured or wild marine shrimp in PNG waters. Some wild shrimp PCR-test positive for infectious hypodermal and hematopoietic necrosis virus.

Samoa

Samoa has very little capacity in diagnosis or management of aquatic diseases. It is not an OIE member. There are no exports of live aquatic organisms to EU. Livestock illness cases are attended by a livestock officer who prepares a paper report, which is transferred to an MS access database. This information is used for reporting to OIE every six months. Samoa has no legislation that requires notification of serious animal diseases. Staff turnover is a big issue; several vacancies exist at present. Only the veterinarian enters data, because it is too time-consuming to train others only to have them leave the job. Field staff have poor reporting skills, and reports made are often verbal. There is little diagnostic laboratory capacity. Access to computers and to the internet is problematic. Of the two main islands in Samoa, only Upolu has internet access. There are no formal internal mechanisms to collate and report aquatic animal health information. The Fisheries Department is consulted about compilation of OIE reports, but has little aquatic disease capacity, which indicates that aquatic animal diseases have largely been a non-issue for Samoa so far in its history.

Solomon Islands

There are no live aquatic exports to EU. A marine ornamental industry in Solomon Islands exports to US. Seaweed is exported to EU, but is (a) a plant, not an animal, and (b) is dead and dried. Animal health reporting is “passive” in the sense that surveillance is based on what farmers report as being a problem. WAHIS has recently been introduced, but Animal Health and Fisheries authorities need to collaborate more to collate data for entry. No in-country database on animal health and disease has existed for the last 10 years, owing to destruction during the ethnic tensions of 2000. The last animal health report was made in 1997. In terms of capacity to report, one staff member is trained in WAHIS. Paravets are being trained to report any animal health issues. There is a lack of formal surveillance owing to tight operating budgets, and a lack of awareness among resource managers and decision makers about the need for reporting. No formal mechanism is in place to collect any animal health information for reporting. A forms system for field visits existed in the past, but has fallen into disuse.

Tonga

Marine ornamental commodities are exported, which include live rock, aquacultured coral, giant clams, and a range of invertebrates like zooanthids and corallimorphs. Live rock is a “big money” industry for Tonga, but a ban imposed on export of wild-harvested rock has led to the trade shifting to Vanuatu. Four species of giant clam are cultured, and EU is the target market for marine ornamentals. Clams are also used domestically for community stock enhancement. Coral aquaculture techniques have been introduced by Walt Smith International, as have aquacultured live rock techniques. Tonga’s focus is now on artificial propagation by aquaculture techniques to target

the international marine ornamental trade. Collection and farming areas are managed, and the number of licences is limited (four companies, two active), under the Aquarium Management Plan 2008. Tonga is not a member of OIE. No aquatic diseases are currently causing problems for anyone in Tonga. Relevant legislation includes the Fisheries Management Act 2003 & Regulations 2008, the Aquaculture Act 2004 & Regulations 2008, and the Aquarium Management Plan 2008.

Vanuatu

The farming of beef cattle is an important industry in Vanuatu. The only live exports at present are marine ornamental fish. Two companies export live fish (Sustainable Reef Supplies, and Reef Life Vanuatu). Because these companies are secretive, communication with them is difficult, for example, the private sector would not provide much information for this country report. Sustainable Reef Supplies exports to EU, among others. No credible data have been provided to the Government on the number of pieces exported or their value. Reef Life Vanuatu sells to Germany, UK, France, Australia and US. Flame angel is the main species of fish exported, and shipments also include wrasses, anthias, damsels and tangs, starfish, anemones, and giant clams *Tridacna squamosa* and *Tridacna maxima*. Malachite green, CuSO₄ and nitrofurazone are used as prophylactics for shipment, not because of any serious pathogens but to prevent opportunistic infections of any small wounds resulting from handling and transport. Any fish can become diseased if over-crowded or mishandled, but in Vanuatu no incurable or serious diseases have appeared and fish mortality is generally low. Social problems exist in the marine ornamental industry, however, for example, the fair payment of villagers. Many jobs go to expatriate Filipino divers. Limits on the number and size of collection grounds under management plans mean that only a few communities can benefit. Only Efate Island communities are engaged. There is a possibility of local-area target stock depletion if the harvest effort is intensified in small areas. The Fisheries Department needs to monitor and report on stock status more frequently. The marine ornamental industry gets a very bad press from tourist operators who see fish collection as competition with their own industry to derive economic benefits from the same reef resources. The Ministry of Agriculture, Quarantine, Forestry and Fisheries is responsible for agriculture. It has four departments: Agriculture, Livestock and Quarantine, Forestry, and Fisheries. The Livestock and Quarantine Department is responsible for animal health in Vanuatu, but will become a separate organisation called Biosecurity Vanuatu in 2011. It is hoped that this restructure will improve efficiency, services, and budgets. Vanuatu operates a Sentinel Farms system for surveillance to monitor and detect outbreaks – 25 farms are monitored twice a year, and their health history is recorded. The Department of Fisheries is the competent authority for aquatic disease surveillance and reporting. Surveillance is costly due to lack of staff and cost of visits. The department needs more livestock staff, based on additional islands. The Animal Importation and Quarantine Act regulates export certification. Vanuatu has a range of legislation in this area. Notifiable diseases listed in national legislation are those of the OIE List.

Day One discussion - What did participants expect to gain from this workshop?

Participants were invited to set out their expectations in terms of what they hoped to gain from the workshop. Points raised were:

- increased awareness about Pacific Island animal diseases and aquatic diseases;
- increased skills and capacity in the use of WAHIS;
- the ability to submit their country's first-ever six-monthly and annual reports to OIE;
- exchange experiences about surveillance and reporting mechanisms;
- identify reporting constraints and develop strategies to address these;

- form national-level working relationships between agencies, and identify appropriate focal points for reporting;
- develop capacity to establish a comprehensive database for collection and reporting of terrestrial and aquatic species within a country;
- identify how Fisheries Acts can provide for aquatic aspects of OIE WAHIS reporting to facilitate trade in live aquatic organisms;
- find out how aquatic disease diagnosis, specimen referral, technical advice and training can be accessed both regionally and internationally to fill gaps in national capacity;
- increase capacity to fulfil the obligations and responsibilities of OIE membership/compliance.

Day One discussion – Common issues across the Pacific region

From exchange of views across the floor of the meeting, these issues seemed to have a commonality across virtually all of the participating PICTs:

- capacity to undertake on-going surveillance of animal health is weak, because of fragmented geography, high inter-island travel costs, poor communication links, and the low number of trained staff. Participants want to gain an understanding of how to set up a regional framework for such surveillance. A regional approach to surveillance has been done before with SPC assistance to implement periodic surveys, but requires staff and resources which cannot be allocated unless countries' ministries of planning accord it priority for externally-funded support.
- how can TADinfo be made to work with OIE reporting? At the moment, information cannot be transferred from TADinfo to WAHIS. PNG does both, so has to do double-reporting. Other systems are also possible but, irrespective of the system, first PICTs need to collect information (at least as hard-copy).
- biosecurity legislation is mainly outdated, and not SPCcompliant. Only Cook Islands and Fiji have updated legislation through the adoption of the SPC-initiated regional biosecurity bill template, to become consistent with OIE, Codex etc. Appropriate regulations are also needed for effective implementation of the legislation, and aquaculture and ballast water issues need to be addressed.
- national-level links to share information and compile it for reports is the main constraint for some countries. Countries have to form their own networks for information flow to enable reporting through one channel.
- some countries have poor on-line access, because of infrastructure problems with internet services or difficulty retaining and using the correct OIE WAHIS access passwords.
- animal health staff from terrestrial backgrounds will need training on identification of aquatic diseases. If they don't know these, they will not report them!

5. Addressing animal health reporting constraints – Group Work

Participatory group exercises were conducted to find out possible follow-on actions from points raised in country reports, and to compile a comprehensive list of issues that might constrain countries from fulfilling OIE compliance responsibilities, sufficient to maintain their opportunities for trade with EU.

Group techniques of “Silent Brainstorming” and “World cafe” were used to identify constraints, and formulate actions to address them. A summary of issues and recommended actions is set out here:

- country focal points to get occasional refreshers on use of WAHIS; training and familiarisation in the use of the Aquatic Codes to be incorporated. An OIE-nominated contact for enquiries should be appointed, to provide feed-back from OIE about the adequacy of country reports. Could an OIE “Helpdesk” facility be established? Clarification of the status of OIE members vs non-members is needed;
- advocate for better management of focal point succession issues within departments, to maintain consistent reportage. For example, OIE reporting functions should be highlighted in departmental work plans, and be explicitly included in relevant job descriptions and duty statements;
- address computer literacy of national WAHIS users – either provide necessary training in the use of computers, GPS, relevant software (e.g. Google Earth) or make formal arrangements to forward hard-copy reports to SPC for on-line submission;
- SPC to take a regional role in developing surveillance guidelines and manuals for terrestrial and aquatic animal diseases, aimed at paravets. Whether a single regional manual will suffice, or whether national manuals tailored for specific countries are needed, must be explored;
- member governments should each have an electronic data management system in place. TADinfo is one possible system. Simpler options can be considered, however, such as a spreadsheet template, or a tailor-made system with access to other SPC databases such as regional fisheries production;
- national-level MOUs can be drafted to develop a formal arrangement between terrestrial and aquatic-competent authorities for data sharing. Relevant staff should make the effort to foster informal official-to-official contacts and working relationships with inter-departmental counterparts;
- MOUs between SPC and SPC member governments for collaboration on information (including data collection) and resource material sharing, and reporting by SPC to OIE on behalf of some countries;
- SPC to liaise with OIE on possible development of a data transfer interface from TADinfo to WAHIS;
- SPC to liaise with NACA on disease diagnosis and technical assistance through SPC associate membership, and preparing a briefing paper for SPC membership on “modalities” of working with NACA;
- opportunities should be identified for vets and paravets to receive in-service training or external work-experience attachments in aquatic animal health, to strengthen the discharge of statutory functions.

6. Briefings by resource persons

Dr Eduardo Leña provided an introduction to NACA, of which SPC is an associate member, on behalf of SPC members. He focused on the aquatic diseases capability of NACA which includes regional reference laboratories, advisory services, and training opportunities. Dr Leña also talked about the main aquatic animal diseases, both OIE-listed and non-listed, likely to be of concern to the Pacific, especially how to diagnose these diseases and manage outbreaks.

During hands-on WAHIS training, Dr Leña provided realistic aquatic animal disease scenarios with which to try out the WAHIS system, and helped participants to make appropriate choices in filling out aquatic sections of their OIE six-monthly and annual reports.

The central points of Dr Leña's presentations were:

OIE-listed diseases (aquatic animals)

The presentation highlighted the role of veterinarians (including aquatic animal health specialists) in public health, control of risks along the food chain and on the general welfare of the animals. Because these services are global public goods, they should be considered as a public investment priority. The criteria for listing aquatic animal diseases under the OIE list were presented, including detailing the parameter(s) that need to be met under the three criteria of consequences, disease spread, and diagnosis.

The OIE list of aquatic animal diseases for 2008 and 2009, and detailed information on some of these diseases, were presented. These include:

- finfishes: epizootic ulcerative syndrome; koi herpesvirus; spring viremia of carp virus;
- crustaceans: white spot syndrome virus; Taura syndrome virus; yellow head virus; white tail disease; infectious myonecrosis virus.

The role of exporting countries in aquatic animal health certification was also discussed, and it was highlighted that the OIE-accredited Aquatic Animal Health Services should be accountable for all health certifications used for international trade.

NACA: Aquatic animal health programme

The Network of Aquaculture Centres of Asia-Pacific (NACA), an intergovernmental organization with 18 member countries in the Asia-Pacific was introduced. NACA resources (downloadable publications) are also available to the public for free. The aquatic animal health programme is one of the NACA's on-going programmes, with the purpose of reducing the risks of aquatic animal disease to safeguard the livelihoods of aquafarmers, national economies, trade and human health. The expected outputs of the programmes were discussed including:

1. improved regional and international cooperation in aquatic animal health;
2. practical national strategies developed, adopted and implemented in member countries;
3. surveillance, reporting and response to disease emergencies in the region improved;
4. harmonised diagnostic procedures and approaches to risk assessment developed in the region;
5. widespread adoption of better aquatic animal health management practices in the region.

The presentation highlighted the surveillance and reporting of OIE and non-OIE listed diseases of aquatic animals among the 21 participating governments through the Quarterly Aquatic Animal Disease reporting system, which has been running since the third quarter of 1998 and has published 47 reports to date.

Emerging and non OIE-listed diseases (aquatic animals) in Asia Pacific

As a follow-up presentation on OIE-listed diseases, other aquatic animal diseases that are important in the Asia-Pacific region were presented. The list is based on the reports received by NACA on emerging disease problems of fish, crustaceans and molluscs reared under aquaculture conditions. Some of these diseases (considering the tropical climate of most Asia-Pacific countries) might pose a threat to the aquaculture industry of PICTs, once intensification of culture systems and introduction of new culture species begins. The diseases discussed included:

- finfish: grouper iridoviral disease; viral encephalopathy and retinopathy (also known as viral nervous necrosis or VNN); enteric septicaemia of catfish; *Streptococcus agalactiae* infection in Tilapia; and *Nocardia* spp. and *Tenacibaculum maritimum* infections in marine fishes.
- crustaceans: monodon slow growth syndrome; necrotising hepatopancreatitis.
- molluscs: akoya oyster disease.

The importance of recognising disease signs which might represent more than one disease should be noted when observing any disease outbreaks. Contacting accredited Aquatic Animal Health Services or Fish Health Experts is vital, to obtain important instructions on procedures that should be taken into account when infected samples are collected, in order to confirm a diagnosis.

Biosecurity Information Facility

Dr Roy Masamdu (SPC Biosecurity and Trade Facilitation Officer) raised awareness about a regional biosecurity database being implemented with SPC assistance, named the Biosecurity Information Facility (BIF). The new Facility will improve information exchange with trading partner countries, and between importers/exporters, biosecurity authorities, and state agencies responsible for policy decisions. This web-based information system operates as a quarantine/biosecurity service as required by trading partners, by providing practitioners with guidelines on what to do at work, and technical and legal guidance and support for decisions at critical points in the process of import and export clearance of all types of commodities.

BIF began as a manual of procedures and reference data for determining and implementing a Biosecurity Service's obligations at national and international level for technically valid sanitary (zoo-sanitary) and phytosanitary measures. Adding many reference texts and links to databases and other information systems has made BIF a broadly based information system for all areas of biosecurity. More information can be obtained from lrhelpdesk@spc.int.

7. Information on WAHIS and WAHID

Ms Anju Mangal gave an overview of the World Animal Health Organisation (OIE), the MOU between SPC and OIE and a brief introduction to WAHIS and World Animal Health Information Database (WAHID) applications.

Key elements of WAHIS and WAHID were outlined as:

- The OIE is the intergovernmental organisation responsible for improving animal health worldwide. It is recognised as a reference organisation by the World Trade Organization and in 2010, had a total of 176 member countries and territories, including FSM, PNG, Fiji, Vanuatu and New Caledonia. The OIE maintains relations with SPC member countries (22 PICTs including the OIE member countries).

WHY DO WE NEED TO REPORT TO OIE?

- to make disease status transparent with trading partners so that they can make decisions on whether to trade and HOW TO trade, e.g., using import conditions;
- SPC negotiated with EU on maintaining market access conditional on establishment of improved animal health reporting through the OIE web based system.

Memorandum of Understanding on WAHIS Regional Core for the Pacific Community

The MOU is supplementary to an existing agreement established between OIE and SPC in September 1999. Signed in December 2008, the purpose of the new MOU is to improve animal disease information sharing among countries through better early warning, and enabling coordinated efforts in emergency response and disease control. The MOU is also a guideline to establish procedures, guidelines and obligations governing data and information sharing between OIE and SPC, to feed the information to WAHIS.

OIE agrees to:

- provide information collected by OIE from member countries of the Pacific Community to SPC on a regular basis;
- provide member countries of the Pacific Community, which are not OIE members, complete access to WAHIS as is provided to OIE members and enable countries to enjoy the same benefits as OIE member countries.

SPC agrees:

- to encourage SPC member countries including those non-OIE member countries to provide information regularly to the OIE using WAHIS;
- that the representatives on animal disease reporting for each SPC member country will be the OIE delegate or his or her representative, or the Chief Veterinary Officer or Head of Agriculture Department or his/her representative.

Data ownership

- Data submitted to WAHIS is owned by the governments of the countries submitting the data as authorised by the Chief Veterinary Officer, Head of Agriculture Department;
- As part of the MOU, data submitted to WAHIS will not be shared or given to other institutions, companies or individuals, other than for legitimate purposes of international trade and or biosecurity.

Data submission

- each member country of SPC shall provide all necessary information for disease notification, including epidemiological information, in accordance with the disease notification requirements outlined in the Terrestrial and Aquatic Animal Health Codes;
- according to the standard disease reporting requirements, each SPC member country agrees to submit immediate notification of the occurrence of an animal disease event, follow-up reports, six-monthly and annual reports through WAHIS.

Introduction to WAHIS and WAHID

The objective of OIE is to ensure transparency in global animal disease, including zoonoses. By deciding to join the OIE, a member agrees to fulfill its international commitment to notify to the OIE, as laid down in the OIE's Code ("Notification and Epidemiological Information"). The Veterinary Authority informs OIE Headquarters and OIE Headquarters contacts the Veterinary Authority for follow-up reports of the suspicion or confirmation of an outbreak of disease or other epidemiological event, according to the provisions of OIE's Codes.

The World Animal Health System (WAHIS) <http://www.spc.int/wahis> comprises:

- (a) A transparent monitoring system to address the regular animal health situation in each member country or territory, with information on all OIE listed diseases:
 - a six-monthly report is submitted twice every year;
 - annual reports contain:
 - additional information;
 - non OIE listed-diseases;
 - zoonoses in humans;
 - animal population;
 - veterinary Services;
 - laboratories and diagnostic tests;
 - vaccine facilities.
- (b) An early warning system, to inform the other member about a disease notification in a country or a territory.

The World Animal health Information Database <http://www.spc.int/wahid> provides access to all data held within OIE's new WAHIS.

Comprehensive information is available as:

- immediate notifications and follow-up reports submitted by member countries in response to exceptional disease events in these countries and follow-up reports on the events;
- six-monthly reports describing the OIE-listed disease situations in each country;
- annual reports providing further background information on animal health, laboratory and vaccine production facilities, and so on.

The system has information available:

- by country (or group of countries);
- by disease;
- on control measures;
- on comparisons of animal health between two countries.

Laurence Fooks presented an overview of the terrestrial Immediate Notification pages on WAHIS, using a worked example. Eduardo Leaña talked about the aquatic Immediate Notification, with a worked example of an aquatic disease outbreak. Dr Sina Moala (Samoa) presented an overview of the six-monthly and annual reports.

OIE international standards

Dr Ken Cokanasiga and Dr Tim Pickering introduced the participants to a number of the key OIE International Standards publications that provide key technical information relevant to the WAHIS disease reporting system:

- OIE Terrestrial animal health code (2008);
- OIE Aquatic animal health code (2008);
- criteria for listing of Diseases by OIE;
- OIE Manual of diagnostic tests and vaccines for terrestrial animals (2008).

8. Disease reporting exercises using WAHIS test system

Participants were provided with logon access to an on-line WAHIS interface administered by OIE. The system was used to enter draft reports, review, edit and submit reports. The OIE member countries were provided with the official username and password.

The SPC resource people provided participants with an Immediate Notification practical exercise for Terrestrial and Aquatic Disease. Participants prepared their Immediate Notification based on the practical exercise. In this way, any apparent anomalies or points for clarification were resolved with the help of the resource people during the training session. Once the practical exercise was completed, participants prepared their official 2008 and 2009 six-monthly OIE WAHIS report submissions. Reports that were in order were then reported back to plenary on the final day of the workshop, and submitted to OIE via the on-line system.

9. Workshop outcomes

The main outcomes from the two SPC workshops, at the completion of this second workshop on 25 June 2010, were first-time submissions to OIE of six-monthly and annual reports (for 2008) using WAHIS by participants from seven of the eight PICTs represented at the workshop, that is, FSM, Fiji, Kiribati, Samoa, Solomon Islands, Kingdom of Tonga and Vanuatu. The remaining country, PNG, prepared reports, which were then "saved as draft" in WAHIS. These are ready for on-line submission, and will be submitted shortly, subject to final checking by their country's OIE Delegate. Four countries also submitted their reports for 2009. The OIE reporting status of the eight participating PICTS as of 25 June 2010 is shown in Table 1.

The national participants who attended this second workshop, their respective roles in the OIE reporting process, and the national authorising officers for their OIE reports, for each of the eight participating PICTs are shown in Table 2.

During the workshop, participants identified various recommendations which they endorsed for follow-up action because, if adopted at national or regional level (as appropriate), these will enhance their capacity to lodge and regularly update animal health status reports to OIE using the on-line system:

- arrange periodic refreshers and updates for country focal points on the use of WAHIS; training and familiarisation in the use of the OIE Aquatic Codes should be incorporated.
- advocate for better management of focal point succession issues within departments, to maintain consistent OIE reportage in the face of regular staff turnover.

- address computer literacy of national WAHIS users; either provide necessary training in computer use, or (if computer availability is problematic) make formal arrangements to forward hard-copy reports to SPC for on-line submission.
- develop regional and/or nationally-oriented surveillance guidelines and manuals for terrestrial and aquatic animal diseases.
- explore options for SPC-member governments to have an electronic data management system in place for animal health information; TADinfo should be investigated as one possible system.
- formalise national-level arrangements for data collection and compilation via MOU's between terrestrial and aquatic competent authorities, and informally foster official-to-official contacts between ministry/department counterparts.
- formalise regional arrangements for collaboration in disease information and resource material sharing, by MOU between SPC and member governments.
- liaise with OIE about development of a data transfer interface from TADinfo into WAHIS.
- liaise with NACA about disease diagnosis and technical assistance to SPC countries/territories through SPC's Associate Membership of NACA, and prepare briefing paper for SPC members on the "modalities" of working with NACA.
- arrange in-service training or external work-experience attachments in aquatic animal health for veterinarians and para-vets, to strengthen discharge of their statutory functions.

Abbreviations

BIF	BioSecurity Information Facility
EU	European Union
FSM	Federated States of Micronesia
NACA	Network of Aquaculture Centres of Asia Pacific
OIE	Office International des Epizooties (World Organisation for Animal Health)
PIFS	Pacific Islands Forum Secretariat
PICTS	Pacific Island Countries and Territories
SPC	Secretariat of the Pacific Community
TADinfo	Trans-boundary animal disease information system
WAHIS	World animal health information system
WAHID	World animal health information database

Table 1. OIE reporting status of participating countries/territories on 25 June 2010

Country	2008 Reports			2009 Reports		
	1st Sem	2nd Sem	Annual	1st Sem	2nd Sem	Annual
Fiji	Submitted	Submitted	Submitted	Draft	Draft	Draft
FSM	Submitted	Submitted	Submitted	Submitted	Submitted	Submitted
Kiribati	Submitted	Submitted	Submitted	Draft	Draft	Draft
Papua New Guinea	Draft	Draft	Draft	Draft	Draft	Draft
Samoa	Submitted	Submitted	Submitted	Submitted	Submitted	Submitted
Solomon Islands	Submitted	Submitted	Submitted	Draft	Draft	Draft
Tonga	Submitted	Submitted	Submitted	Submitted	Submitted	Submitted
Vanuatu	Submitted	Submitted	Submitted	Submitted	Submitted	Submitted

Table 2. Workshop participants, areas of expertise, and OIE-report authorisations

Countries		Authorisation Template – CVO/Director
Federated States of Micronesia	Terrestrial (Gibson Susumu)	Gibson Susumu
	Aquatic (Valentin Martin)	Valentin Martin
French Polynesia	Terrestrial (Valerie Antras)	Philippe Courard
Fiji	Terrestrial (Robin Achari)	Tomasi Tunabuna
	Aquatic (Meli Raibece)	Sanaila Naqali
Kiribati	Terrestrial (Rakentai Kabotoa)	Kinaai Kairo
	Aquatic (Taratau Kirata)	Taratau Kirata
Papua New Guinea	Terrestrial (Agnes Kila)	Nime Kapo
	Aquatic (Gideon Pama)	Augustine Mobiha
Samoa	Terrestrial (Sina Moala)	Dr Sina Taulealo Moala
	Aquatic (Clifton Sa'e)	Mr Clifton Gosta Sa'e
Solomon Islands	Terrestrial (Barney Keqa)	Barney Banabas Keqa
	Aquatic (Alex Meloty)	James Teri
Tonga	Terrestrial (Naulangi Fosita)	Tevita Faka'osi
	Aquatic (Poasi Fale)	Vilimo Fakalolo
Vanuatu	Terrestrial (Roger Phillips)	Tekon Timothy Tumukon
	Aquatic (Lency Dick)	Moses Amos

SPC Regional Terrestrial & Aquatic Animal Disease Reporting Workshop
Novotel Hotel, Nadi, FIJI.
June 21–25, 2010.

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**REGIONAL TERRESTRIAL AND AQUATIC ANIMAL DISEASE REPORTING
SECRETARIAT OF THE PACIFIC COMMUNITY**

Novotel, Nadi, FIJI: 21 – 25 June, 2010

Programme

Day 1	Monday, 21 June, 2010	
8.00 – 8.30	Registration	
8.30 – 9.00	Opening Ceremony Opening Prayer Welcome and Opening remarks by SPC: Opening Remarks by Forum Secretariat	Ken Cokanasiga (SPC) Tim Pickering on behalf of (PIFS)
9.00 – 9.30	What’s at stake with the regional marine ornamental fish trade?	Walt Smith
9.30 – 10.00	Implications of recent EU legislative amendments for countries that export ornamental fish, and outcome of negotiations by SPC. Responsibilities of PICTs under current EU requirements for the import of live aquatic species: disease reporting	Tim Pickering PIFS
10.00 – 10:30	Morning Tea (Including Group Photo)	Facilitator - Tim
11.00 – 12.30	<ul style="list-style-type: none"> • Overview of Animal Disease Reporting in each Country/Territory: • Is there an industry exporting live animals to EU, in particular marine ornamental fish? (Summary of status) • What arrangements or mechanisms are in place, in terms of reporting? • What is the current capacity for reporting? • Main issues or constraints for timely and effective reporting? • What internal mechanisms exist to collate aquatic animal health information for reporting? 	PICTs (15 minute powerpoint – presented jointly if 2 participants per PICT)
12.30 – 1.30	Lunch	
1.30 – 2.30	Country reports (continued) Open Discussion – main issues, areas of commonality between PICTs	Participants
2.30 – 3.00		Roy Masamdu

	Biosecurity Information Facility (BIF)	
3:00- 3:30	Afternoon tea	
3.30 – 4.00	Ornamental Fish Trade to EU and Disease Reporting	Tim Pickering
4:00 - 5:00	The OIE Aquatic Codes and Manual of Standards and relevance to international trade Overview of OIE-listed disease threats related to trade, and appropriate national responses: - Terrestrial - Aquatic	Ken Cokanasiga (SPC) Eduardo Leaña (NACA)
	End of Day 1	
6.00 – 8.00	Cocktail by the Pool	

Day 2	Tuesday, 22 June	
8.30 –9:30	Overview of NACA? NACA-coordinated regional framework for aquatic animal disease (surveillance, diagnosis, accredited labs, databases, expert advice, specimen referral system, etc.) - How can PICTs access via NACA channels?	Eduardo Leaña (NACA)
9:30 -10:00	Open discussion of PICT aquatic animal disease issues	Participants
10.00 – 10.30	Morning Tea	
10.30 – 12.00	Introduction to Group work: Overview of existing Pacific regional frameworks to support national terrestrial and aquatic animal disease reporting systems Silent-brainstorming World Café Group work – constraints at national level Summation of issues and any recommended actions. (1) constraints or knowledge gaps; and (2) strategies to address constraints/gaps	SPC Participants
12.00 – 12.30	Overview – Google Earth	Laurie Fooks (SPC)
12.30 – 1:30	Lunch	
1.30 – 2.30	Introduction to OIE non-listed aquatic diseases	Eduardo Leaña

	of regional relevance: diagnosis and management (emphasis on shrimp, tilapia, pearl, marine ornamental fish)	(NACA)
2.30 – 3.00	Hands-on GPS training	Laurie Fooks Anju Mangal (SPC)
3.00 – 3.30	Afternoon tea	
3.30 – 5.00	<p>Presentation of MOU between SPC and OIE (printed and placed in the folder)</p> <p>Introduction to WAHIS and WAHID</p> <p>Overview of Immediate Reporting Practical Exercises (Terrestrial; Aquatic Animals)</p> <p>A “worked example” of an Immediate Report:</p> <ul style="list-style-type: none"> - Terrestrial - Aquatic (e.g. koi herpesvirus) 	<p>Anju Mangal</p> <p>Laurie Fooks</p> <p>AH/Aquatic specialists: Sina Moala, Valerie Antras (FP), Eduardo Leaña</p>

Day 3	Wednesday, 23 June	
8.30 – 10.00	<p>Reporting Practical Exercises (Terrestrial; Aquatic Animals)</p> <ul style="list-style-type: none"> • Hands-on training with WAHIS Test Version • Account Management • Country Parameters 	SPC
10.00 – 10.30	Morning Tea	
10.30-12.30	Test version on WAHIS - Practical exercises continued	SPC
12.30 – 1.30	Lunch	
1.30 – 5.00	<p>FIELD TRIP</p> <p>Marine Ornamental exports – Walt Smith International, Lautoka</p>	Tim Pickering

Day 4	Thursday, 24 June	
8.30 – 10.00	<p>Reporting Confirmation (Terrestrial; Aquatic Animals)</p> <ul style="list-style-type: none"> • Draft WAHIS submission • Account Management • Country Parameters 	Anju Mangal
10.00am – 10.30	Morning Tea	
10.30 – 12.30	Reporting continued	Anju Mangal
12.30 – 1.30	Lunch	

1.30 – 3:00	Reporting continued	Anju Mangal
3:00 – 3:30	Afternoon Tea	
3.30 – 5.00	Discussion of each country report	PICTs
	End of Day 4	

Day 5	Friday, 25 June	
8.30 – 10.00	Presentation on each country report to plenary, and online submissions	PICTs
10.00 – 10.30	Morning Tea	
10.30 – 12.00	<ul style="list-style-type: none"> • Establishing Focal points – In country Aquatic and Animal Health reporting mechanisms • Updated OIE contact list • Reporting commitment from countries – six-monthly report and immediate report • Draft strategy for improved regional disease reporting <p>Endorse drafting of MOU between SPC and PICTs for regional disease reporting and identify items for inclusion (including monitoring role of SPC)</p>	PICTs/SPC
12.00 – 1.00	Lunch	
	End of Workshop	