

Secretariat of the Pacific Community

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**Background Paper 6**

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## **Aquaculture Outputs Against Strategic Plan 2006-08**

Marine Resources Division  
Secretariat of the Pacific Community  
Noumea, New Caledonia

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### Annual Summary of Progress against Aquaculture Objectives for CFP Strategic Plan 2006-2008

<b>Objective: A regional support framework for economically, socially and environmentally sustainable aquaculture planning, research and development by Pacific Island governments and private enterprises</b>			
<b>Outputs</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
<p><i>Output 2.1 A regional network of contacts to exchange ideas, overviews and experience on aquaculture issues both regionally and internationally.</i></p> <p><b>Generic activities</b> Expand and improve information clearing house mechanisms, such as the SPC aquaculture web-portal, special interest group bulletins, databases on expert contacts, statistics and trainees etc.</p> <p>Strengthen links to regional spheres of interest, in particular Australasia and Asia, and encourage regional collaboration where mutual benefits may occur.</p> <p>Maintain SPC as the regional focal point for aquaculture within CROP agencies or other</p>	<ul style="list-style-type: none"> <li>• 2<sup>nd</sup> SPC Regional Aquaculture Meeting</li> <li>• Web portal avg. 110,000 hits/month</li> <li>• New SPC Pearl Bulletin launched</li> <li>• 17<sup>th</sup> NACA Governing Council Meeting, Iran, Feb06</li> <li>• Letter of interest from SEAFDEC Directorate</li> <li>• Officer as trainer for feed workshop at AIT, Bangkok</li> <li>• DAFF on Indigenous Aquaculture session, Australasian Aquaculture 06, Adelaide, Sep06;</li> <li>• Completion Joint QDPI, ACIAR mini-project Phase 1, 14 projects in 8 countries, AUD185,000 dollars.</li> <li>• FAO Aquaculture Sub-committee</li> </ul>	<ul style="list-style-type: none"> <li>• SPC Aquaculture Action Plan 2007 published.</li> <li>• Trial cd-rom version of portal produced</li> <li>• 18<sup>th</sup> NACA Governing Council, Bali, May07</li> <li>• ACIAR Biannual Fisheries Meeting, Townsville, Aug07;</li> <li>• Project formulation meetings for joint JCU, ACIAR mini-projects phase 2, approval in Nov07 (AUD1.4 mill dollars)</li> <li>• Asia-Pacific board for World Aquaculture Society; WAS</li> </ul>	<ul style="list-style-type: none"> <li>• Web portal avg. 130,000 hits/month, 30,000 unique visitors.</li> <li>• Portal reconfigured to CMD software (Joolma)</li> <li>• 19<sup>th</sup> NACA Governing Council Meeting, Nepal 4-7<sup>th</sup> Mar08</li> <li>• US\$50K from Taiwan for strengthening industry links with Asia</li> <li>• ACIAR mini-project leaders Fiji Feb08, Brisbane Aug08</li> <li>• Coordination of 9 approved ACIAR mini-projects (AUD160K), additional 7 projects in pipeline</li> <li>• Organizer/co-chair &amp; presenters for Indigenous Aquaculture session, Brisbane Aug08. Presentations to marine ornamental sessions</li> <li>• FAO ad-hoc Coordinating Working Party</li> </ul>

<p>agencies, and advocate on behalf and for the benefit of the region at global forums concerning aquaculture policy and administration, particularly within the United Nations, FAO system.</p> <p><i>Output 2.2 Establishment of environmentally and economically sustainable aquaculture enterprises by Pacific government departments and/or private sector.</i></p> <p><b>Generic activities</b> Focus development on the key SPC aquaculture commodities accorded a priority through regional consultations, and continue programme support to ensure immediate and long-term priority needs in the sector are being assessed and addressed.</p> <p>Assist in strengthening economic, environmental, and financial planning support to aquaculture enterprises in the region.</p> <p>Assist countries to develop the strategic framework required to sustainably manage the aquaculture sector (eg through National</p>	<p>conference in New Delhi, Sep06</p> <ul style="list-style-type: none"> <li>• FAO regional statistics for World Aquaculture 2006, Guandong, Mar06</li> <li>• Asia-Pacific board member for World Aquaculture Society (WAS)</li> </ul> <ul style="list-style-type: none"> <li>• Program visits Papua New Guinea, Micronesia, Palau, Saipan, French Polynesia, Cook Is (2x), Kiribati, Solomon Is, Samoa (2x), Nauru (2x), Fiji (2x); &gt;6 months</li> <li>• Collaboration with consultant economist from the Queensland government</li> <li>• Assist National Pearl Economics workshop and Industry Seminar in the Cook Islands, Aug06</li> <li>• Assistance to Vanuatu national aquaculture plan</li> <li>• ACIAR mini-projects include tilapia</li> </ul>	<p>Aquaculture Conference, Hanoi, Aug07</p> <ul style="list-style-type: none"> <li>• Program visits to Solomon Is (2x) Fiji, Marshall Is, Nauru, Kiribati, New Caledonia, Cook Is (2x), Samoa (2x), Vanuatu</li> <li>• Action Plan drafting committee, SPC Noumea, Apr07</li> <li>• Economic review for Marshall Islands national pearl workshop, Mar07</li> <li>• Advise for Institutional Strengthening Projects in Solomon Is and Cook Is</li> <li>• Host JICA-Vanuatu team to SPC</li> </ul>	<p>(CWP) on Fisheries Statistics &amp; FAO Aquaculture Sub-committee meeting, Chile Oct08</p> <ul style="list-style-type: none"> <li>• Completed term on WAS board. Current Asia-Pacific membership approx. 700 persons</li> <li>• VIIIth International Symposium on Tilapia in Aquaculture, Cairo, Oct08</li> <li>• Pacific Ocean Threats (aquaculture), Hawaii Aug08</li> <li>• 2 x consultations in Fiji on SOPAC, SPREP RIF merger</li> <li>• Aquaculture climate change chapter for AusAID/SPC project</li> <li>• Staff programming visits to French Polynesia, Cook Is, Solomon Is (3x), Fiji (2x), Tonga (2x), Palau, Vanuatu, Samoa. &gt;4 months</li> <li>• Aquaculture Action Plan 2007 endorsed at FFC Ministerial, Palau Oct08</li> <li>• Joint SPC-QDPI Tropical Aquaculture Economics workshop, Brisbane, Aug08</li> <li>• Eur30 from French Development Fund assistance in Wallis &amp; Futuna</li> <li>• Bilateral assistance for <i>Pteria</i> pearl in</li> </ul>
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<p>Sector Plans), as well as tactical inventions to overcome industry bottlenecks (eg through mini-research projects).</p>	<p>restocking in Savaii, Samoa; fish pond rehabilitation in Nauru, cage culture in lake Yonki, Papua New Guinea, freshwater shrimp farming in Vanuatu and Wallis &amp; Futuna, fish &amp; shrimp feed formulation in Fiji and eel aquaculture in Fiji</p> <ul style="list-style-type: none"> <li>• Euro30K from French Development Funds for post-larval capture culture exchange French Polynesia and Cook Is</li> </ul>	<ul style="list-style-type: none"> <li>• Assist government committee for national marine-fish hatchery in New Caledonia</li> <li>• Independent review for govt of EU seaweed project in Solomon Islands</li> <li>• Advise to private sector incl. - tuna farming (Vanuatu, Samoa), grouper culture (New Caledonia), rabbitfish farming (New Caledonia), sea cucumber (Vanuatu, Fiji, Solomon Is, Wallis &amp; Futuna), marine ornamentals (numerous countries)</li> <li>• Vanuatu Plan submitted for cabinet approval.</li> <li>• Assisted new bodies incl. Cook Islands Titikaveka Growers Association (TGA), Nauru Aquaculture Association (NAQUA), Vanuatu Aquaculture Association</li> </ul>	<p>Tonga and <i>Macrobrachium rosenbergii</i> genetics in Fiji; JICA Sustainable Coral Resources project in Vanuatu; ADECAL scallop spat collection in New Caledonia; ADF/IFREMER <i>Peneaus monodon</i> shrimp cage culture in Fiji</p> <ul style="list-style-type: none"> <li>• Vanuatu Aquaculture Plan published &amp; distributed. Final draft of Solomon Islands Plan reviewed at national workshop, Honiara, Oct08; Revise Palau Bureau of Marine Resources Development Plan (aquaculture)</li> <li>• one day seminar for Tonga pearl association, Vavau, Jan08</li> <li>• 6 month project with SOPAC and USP to develop aquaculture GIS platform. National workshop held, Suva, Feb08</li> </ul>
<p>Provide technical assistance and strengthen capacity where needed on a national and regional basis through a range of activities including training, consultancies, attachments and other interventions as required.</p>	<ul style="list-style-type: none"> <li>• 8 workshops of national/regional interests in New Caledonia, Samoa (2x), Nauru (2x), Cook Islands, Fiji (2x). A total of 108 participants were involved</li> <li>• Construct fish ponds at CETC centre in Fiji and one week training for 31 women in tilapia farming</li> <li>• Organised marine seminar for Pacific Youth Festival, Tahiti, June06.</li> <li>• Organised/funded Fiji, Micronesia and Marshall Islands participants to Cook Is pearl workshop</li> </ul>	<ul style="list-style-type: none"> <li>• 3 week regional training course for Pacific Islanders (6 pp) in marine finfish hatchery at Krabi, Thailand, Jul07; 1 week pearl jewellery training workshop, Tarawa, Jun07 (15 pp); 2 week tilapia farming workshop, Cook Islands (20 pp)</li> <li>• Study tour to Vietnam of 10 shrimp farmer representatives from New Caledonia. Study tour of New Caledonian for Vanuatu JICA project.</li> <li>• Consultants - environmental impact assessment for FSM coral farm; Cook</li> </ul>	<ul style="list-style-type: none"> <li>• Vavau Pearl seminar Jan08 (10 pp); SPC-SOPAC GIS workshop Fiji Feb08 (25 pp); Co-chair Australisan Indigenous Aquaculture Session, Aug08 (100+pp); SPC-QDPI Tropical Aquaculture Economics workshop, Aug08 (10pp); Solomon National Aquaculture planning workshop, Oct08 (40 pp); SPC-SPREP-CRISP Marine Ornamental Workshop Dec08 (40 pp); pearl handicraft jewellery training workshop Vavau Jul08, seaweed training, Kadavu, Fiji, Aug08</li> </ul>

<p><i>Output 2.3 A regional support service to help in assessing, managing and mitigating</i></p>	<ul style="list-style-type: none"> <li>• Funded/organised a 3 week attachment for 2 persons from Nauru to Fiji, Oct06</li> <li>• Funded/organised rep from the OkTedi Mine Ltd in Papua New Guinea to Indigenous Aquaculture session, Australia</li> <li>• Consultants - eel specialist (Australia) for Fiji, geneticist (Australia) as workshop trainer, mariculturists (France) for seaweed and ornamental trade statistics</li> <li>• Joint USP shrimp farming and hatchery manuals, 3 technical reports for mini-projects, assist ACIAR regional monograph for Kappaphycus seaweed</li> </ul>	<p>Is pearl jeweller for Kiribati training; interim freshwater specialist from USP; GIS specialist for aquaculture planning</p> <ul style="list-style-type: none"> <li>• New mini-projects for ornamental clown fish aquaculture (Vanuatu), rabbitfish farming (Solomon Is), pearl spat and mabe (Fiji) and seacucumber restocking and ranching (Fiji)</li> <li>• Tilapia lake restocking in Savaii, Samoa</li> <li>• Technology transfer project of post-larval capture and culture between French Polynesia and Cook Is.</li> <li>• Aquaculture strategic planning project using a GIS analysis of resources and population growth</li> <li>• Publications include SPC Aquaculture Action Plan 2007, Vanuatu National Aquaculture Strategy 2006, SPC technical reports for Mabe pearl jewellery, Marine grouper hatchery techniques; Assistance for EU Seaweed farming manual in Solomon Islands, ACIAR mini-project (14 project reports); Workshop cd-rom for Marshall Island pearl workshop</li> </ul>	<ul style="list-style-type: none"> <li>• Attachment for 2 persons Cook Islands to French Polynesia (post-larval capture); 1 person Vanuatu to Fiji (freshwater prawn); 1 person Solomon Islands to Fiji (tilapia)</li> <li>• 3 Pacific Islanders to Australian AA08 conference; 1 French Polynesia to 7<sup>th</sup> Symposium on Aquaculture Diseases in Asia-Pacific, Taipei</li> <li>• Assisted study tour to Vietnam for 4 persons from New Caledonia</li> <li>• Approx. €40K for mariculture support accessed through the CRISP project</li> <li>• Consultants - Master pearl jeweller (Cook Is) for Tonga; Post larval capture culture biologist (French Polynesia) for Cook Islands; Veterinarian biosecurity (Vanuatu) for region; 3 month GIS specialist (Regional)</li> <li>• Publication of Post Larval Capture technology application; GIS tools for strategic aquaculture planning, Marine finfish regional strategies (Final Draft), Policy Brief on Aquatic Biosecurity</li> <li>• Staff providing USP supervision of students. Auxiliary and/or supervisory support ACIAR post-graduate scholarships in shrimp cage culture (M.Sc), pearl recruitment (M.Sc), half-pearl formation (M.Sc), freshwater shrimp breeding (M.Sc) and prawn disease (Ph.D). Support for Dec 2008</li> </ul>
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<p><i>the potential impacts of aquaculture, including exotic introductions and quarantine.</i></p> <p><b>Generic activities</b> Develop model quarantine protocols, import risk assessments (IRAs) and strengthen inter-agency links between fisheries, quarantine and environment agencies.</p> <p>Seek implementation of the proposed USD \$600,000 Regional Biosecurity project drafted in 2005 and put in place an operational biosecurity unit with a regional</p>	<ul style="list-style-type: none"> <li>• Collaboration with FAO on biosecurity. SPC model import risk analysis has been distributed among the Pacific island governments</li> <li>• advise for quarantine and biosecurity to Cook Islands (oyster, tilapia), Papua New Guinea (prawn), Vanuatu (tilapia) and Micronesia (legislation)</li> <li>• No additional funding resources have been provided to meet regional biosecurity requirements.</li> </ul>	<ul style="list-style-type: none"> <li>• Organise first regional aquatic biosecurity workshop for fisheries, environment, quarantine and veterinarian services (60 pp)</li> <li>• desktop advise to government for sea cucumber, grouper finfish, marine shrimp and freshwater prawn</li> <li>• collaborating with SPREP on regional initiatives concerning introduced and invasive species</li> <li>• FAO workshop in Thailand, July07 to develop generic aquaculture risk assessment models</li> <li>• Aquatic biosecurity in SPC Governing Council (CRGA) recommendations</li> </ul>	<p>applicants - freshwater shrimp (MSc), pteria pearl (MSc), rabbitfish farming (PgDip)</p> <ul style="list-style-type: none"> <li>• SPC Aquatic Biosecurity Policy completed, distributed at the FFC Ministerial meeting and SPC Governing Council meeting.</li> <li>• Assisted the Marshall Islands EPA to review an EIA for 10-50,000 tonne marine finfish project</li> <li>• Participant workshop on invasive species convened by CBD Secretariat, Chicago 9-11<sup>th</sup> May08; Assistance provided to the Global Invasive Species Register (GRIS) project for Pacific Islands data and plans for a joint SPC collaboration; Assisted SPREP and SPC LRD for a regional strategy on for invasive species</li> <li>• Presented at the Commonwealth Veterinarian Association, Samoa Nov08</li> <li>• Progress with European Commission for derogation of SPC countries for OIE membership through establishment of Pacific Animal Health Information System (PAHIS)</li> <li>• Endorsement for regional biosecurity program at FFC Ministerial and SPC Governing Council. Biosecurity proposal revised and submissions to</li> </ul>
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<p>perspective, initially targeting several countries being a cross-sectional representation in which to develop models. Continue to develop best management practices in the aquaculture sector, and enhance capacity of veterinary and health services, disease management and response programmes and information databases.</p>			<p>European Union</p> <ul style="list-style-type: none"><li>• Engaged and funded a aquatic biosecurity consultant (6 months) to provide regional advise/assistance</li></ul>
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