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SOUTH PACIFIC COMMISSION

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PROJECT ACTIVITIES OF FAO SOUTH PACIFIC AQUACULTURE DEVELOPMENT PROJECT, FROM JULY 1989 TO JULY 1990

1. Introduction

The South Pacific Aquaculture Development Project (SPADP) commenced in December 1986, in order to assist development of aquaculture and to strengthen management systems aiming at optimum exploitation level of reef resources in the project countries. The project is trust-funded by the Japanese Government with US\$2 million in five years. Based in Suva, the project serves 15 countries in the region. Project activities are mainly: 1)to provide advisory services, 2)to conduct surveys and studies, 3)to supply up-to-date information, 4)to support equipment supply and 5)to provide trainings and expert consultations.

The project is forwarded by a Project Manager/Regional Aquaculturist (Hideyuki Tanaka) and an Associate Professional Officer (Roberto Foscarini, Aquaculturist) of which post is funded by the Italian Government since February 1989.

2. Project Activities in the Country

The project carried out the following activities during the period from July 1989 to July 1990.

- a) Cook Islands
 - -Assignment of a UNV (aquaculturist) for the Mitiaro Milkfish Project and supply of equipment and materials for field surveys -Equipment supply for the National Giant Clam Hatchery in
 - Aitutaki
- b) Federated States of Micronesia
 - -Assistance in the preparation of the National Aquaculture Development Plan
 - -Support to development of sponge culture trial in Pohnpei
 - -Arrangement of engineering consultation for designing hatchery layout and water intake for the proposed National Aquaculture Center at Kosrae
 - -Liaison service in recruitment of aquaculture volunteers
 - -Supply market information on sponge

c) Fiji

- -Consultation on improvement of shrimp production for the Prawn Fiji Ltd.
- -Organization of in-country workshop on seaweed culture held in November 1989 in conjunction with a regional workshop on seaweed culture and marketing
- -Preparation and publications of extension manuals used for the rural fish farming programme (Tilapia) and seaweed farming
- -Advice on bilateral technical cooperation programme, particularly on feed development
- -Supply of submersible water pump for the Prawn Fiji Ltd. and seaweed baling machine and packing material for the seaweed workshop

d) Kiribati

- -Assignement of a milkfish pond manager for strengthening production of bait-fish in the Temaiku Milkfish Farm
- -Supply of seaweed baling machine

e) Marshall Islands

-Provision of follow-up programme for the proposed consultancy on black pearl culture in Namorik Island

f) Nauru

-Preparation of milkfish stocking programme in Buada Lagoon concurrently with Tilapia eradication programme

g) Niue

- -Consultancy on stock assessment and resource management of coconut crab
- -Consultancy on reef resource stock survey in accolabolation with SPC Inshore Fisheries Research Project

h) Palau

- -Liaison service to a Okinawa clam buyer for promoting a trade of young cultured giant clam
- -Liaison service to bilateral aid organization for assignment of Trochus expert
- -Advice on aquacultural exploitation of coastal ponds
- -Experiment of giant clam smoking
- -Supply of submersible pumps, air blowers and FRP tanks for giant clam hatchery

i) Papua New Guinea

-Prefeasibility study on aquaculture development potential in the Central Province

j) Solomon Islands

-Consultancy on shrimp brood stock survey and hatchery establishment for South Pacific Aquaculture Ltd.

k) Tokelau

- -Consultancy on stock survey of giant clam and black-lip pearl shell
- -Transplantation of Trochus to Atafu and Nukunonu Atolls in association with the FAO Regional Fishery Support Programme with the assistance of the New Zealand Air Force
- -Supply of an air compressor for SCUBA tank for co-use with Western Samoa

-Provision on black-lip pearl shell transplantation from Manihiki, Cook Islands

1) Tonga

- -Assistance in preparation of a project proposal of coastal aquaculture research and development and liaison service to bilateral aid organizaion for implementation
- -Transplantation of 10,000 mullet fry into Lake Ano from the Oceanic Institute, Hawaii
- -Stock survey of winged pearl shell in Vava'u
- -Spat collection and grow-out experiment of winged pearl shell in Vava'u
- -Supply of net for fish cage

m) <u>Tuvalu</u>

-Transplantation of Trochus to Nui and Nanumea atolls in association with the FAO Regional Fishery Support Programme with the assistance of the New Zealand Air Force

n) Vanuatu

- -Restoration of Trochus hatchery
- -Consultancy on Trochus seed production and resource management
- -Supply of Trochus hatchery equipment and SCUBA gears

o) Western Samoa

- -Assistance in setting a larval rearing tank of giant clam
- -Consultancy on culture trial of single triploid-oyster and setup of oyster culture facility in Safata Bay
- -Preparation of project proposal for green mussel pilot farming in Asau Bay
- -Arrangement of giant clam hatchery rehabilitation
- -Supply of giant clam hatchery equipment, SCUBA diving gears and water pumps

3. Training Activities

The SPADP organized and sponsored the following trainings and study tours. Number of participants is shown in parenthesis.

| Training | Participants | Training place | Dı | ration & time |
|-------------------------|------------------|---------------------|----|-----------------|
| -Integrated fish | Palau(1) | NACA, China | | mon.Apr-Aug'89 |
| farming | | | _ | |
| -Srimp hatchery | PNG(1) | SEAFDEC, | 3 | mon.Aug-Oct'89 |
| and fish nutrition | | Philippines | | _ |
| -Giant clam culture | Fiji(1) & | CAC, ICLARM, | 2 | wks, Jul-Aug'89 |
| | Tonga(1) | Solomon Isl. | | |
| " | FSM(1) | MMDC, Palau | | wks, Nov-Dec'89 |
| " | Tokelau(1) | JCU,Australia | | wks,Jan-Feb'90 |
| -Trochus seed | Palau(1) & | Okinawa,Japan | 3 | wks,Jun-Jul'90 |
| production | Vanuatu(1) | | | |
| -Seaweed culture | Tuvalu(1) | In Fiji | | wks,Jul'90 |
| -SCUBA,Open & | Vanuatu(4) | In Vanuatu | | wks, Sep'89 |
| advance | Kiribati(1) | In Fiji | | wks, Apr'90 |
| -SCUBA, Instructor | Cook Is.(1) | In Cook Is. | 2 | wks,Dec'89 |
| Chada tana | | | | |
| Study tour -Black pearl | Cook Is.(1) | Okinawa | 1 | wk, Aug'89 |
| culture | COOK 15. (1) | OKINAWA | _ | wx, Aug 69 |
| -Coastal agua- | FSM(1), | Guam, Okinawa | 2 | wks,Jun-Jul'89 |
| culture and | Fiji(1), | and Aichi, Japan | _ | wks,oun our os |
| restocking | Kiribati(1), | and mionity out and | | |
| 10000011119 | Palau(1) & | | | |
| | Tonga(1) | | | |
| -Trochus hatchery | Vanuatu(1) | MMDC, Palau | 1 | week,Jul'90 |
| - | , , | • | | • |
| Regional workshop | | | | |
| -SCUBA maintenance | | In Fiji | 3 | days, May'90 |
| | Fiji(11), | | | |
| | Kiribati(1), | | | |
| | Palau(1),Tonga(1 | L) | | |
| | & W.Samoa(2) | _ | | |
| -SCUBA maintenance | | In Palau | 4 | days, Jul'90 |
| | Marshall Is.(1), | • | | |
| | Palau(4),PNG(1) | | | |
| | & Vanuatu(1) | | | |
| | Fiji(32), | In Fiji | 4 | days, Nov'89 |
| | Kiribati(1), | | | |
| | Palau(1), | / T \ | | |
| | Tonga(1),ORSTOM | | | |
| 1 | FFA(1) & USP(1), | • | | |

4. Expert consultancy

| <u>Item</u> | Country | Consultant(national) | <u>Date</u> |
|---|-----------|----------------------|------------------|
| Consultants a)Shrimp hatchery | Solomon I | s. J.Dulone(Fra) | 3 wks,Jul'89 |
| b) Shrimp culture | | R.Young(Phil) | 2 wks, Nov'89 |
| c)Seaweed biology | | G.Trono(Phil) | 4 days, Nov'89 |
| <pre>d)Seaweed processing/ market</pre> | Regional | D.McHugh (Aus) | II |
| e)Trochus seed production | Vanuatu | W.Nash(Aus) | 4 wks, Jan-Feb'9 |

| f)Coconut crab stock assessment-Phase I | Niue | C.Schiller(Aus) | 3 wks, Apr-May'9 |
|---|----------|-------------------|------------------|
| g)Triploid oyster culture | W.Samoa | R.Cutler(Can) | 3 wks,Jun-Jul'9 |
| h)Reef stock survey (with SPC) | Niue | S.Lindsay(Aus) | 3 wks,Jul'90 |
| Lecturers and specialist | | | |
| a) Giant clam smoking | Palau | N.Trachet(FAO) | 2 wks, Nov'89 |
| b) Seaweed processing | Regional | I.Neish(USA) | 4 days, Nov, 89 |
| c)Seaweed culture | Regional | R.Barraca(Indo) | # |
| d)Seaweed post-harvest | Regional | W.Blakemore(USA) | 11 |
| e)SCUBA maintenance | Regional | L. Farnel (USA) | 7 days,Mar&Jul'9 |
| f)Milkfish culture | Kiribati | E.Dela Cruz(Phil) | since Jul.90 |

5. Proposed Activities in the Future

a) The SPADP will continue its activities to assist in the formulation of long-term aquaculture development plan of project countries and to identify aquaculture development opportunities through feasibility studies and/or extension trials and also assist countries in attracting external assistance for their exploitation. Assistance in the implementation of follow-up programmes based on national development plans of aquaculture, and technical advisory services, equipment supply and training for supporting the on-going activities will be also provided through the SPADP.

The following are proposed activities to be carried out in 1990/91.

- (a) Assistance in setting-up giant clam hatcheries in Cook Islands and Federated States of Micronesia.
- (b) Expantion of Trochus hatcheries of Palau and Vanuatu
- (c) Support for development of sponge culture in Federated States Micronesia;
- (d) Guidance to winged pearl shell grow-out in Tonga;
- (e) Guidance to triploid oyster grow-out in Western Samoa;
- (f) Feasibility study of fish stocking programmes in Tuvalu and Western Samoa;
- (g) Assistance in transplantation of black-lip pearl shell to Tokelau from Manihiki, Cook Islands;
- (h) Assistance in preparation of milkfish development plan in Buada Lagoon, Nauru;
- (i) Assistance in formulation of coconut crab resource management plan in Niue;
- (j) Assistance in preparation of green mussel pilot farming project in Western Samoa;
- (k) Support for milkfish culture enjhancement in Kiribati;
- (1) Mid-term review of Mitiaro Milkfish Project, Cook Islands;
- (m) Publications of project consultancy reports and workshop proceedings.

Activities other than the ones mentioned above will be also considered for implementation during 1990/91.

- b) In order to promote a steady development of aquaculture industry, the SPADP will actively assist in the marketing development of aquaculture products, particularly export commodities. Marketing information on aquaculture potential species will be also vigorously collected and disseminated to the countries. The following activities are proposed for implementation:
 - (a) Assistance in marketing development of cultured giant clam and sponge;
 - (b) Assistance in marketing strategy of seaweed;
 - (c) Development and demonstration of value-added products;
 - (d) Collection and dissemination of up-to-date marketing information of black pearl and seaweed;
 - (e) Strengthening of socio-economic study for establishing healthy management/operation system of aquaculture managements;