

## AQUACULTURE SECTION : WORKING REPORT

### Status of programmes as of Sept '92

The year '92's schedule were a continuation of existing programmes from the previous years in particular the "rehabilitation programme" for the Giant clams, continuation of Eucheuma seaweed cultivation of a pilot farm and establishment of the Salani freshwater fish farm.

Various activities were undertaken in early in the year for the Aquaculture section namely :

Field visits to Leulumoega freshwater ponds, Satapuala Resort, Malua fish pond and Salani ponds. As well as fortnightly visits to Namu'a Island, Aleipata in monitoring Giant clam ocean nursery and Seaweed pilot sites.

To date the following are the main programmes implemented and constantly maintained by the Aquaculture section :

1. Tilapia-Salani farm
2. Giant clam ocean nursery-Namu'a aquacultural farm
3. Seaweed (Eucheuma) pilot farm-Namu'a aquacultural farm

#### TILAPIA-SALANI FARM

Through the FAO/SPRADP rehabilitation programme funds were identified by Mr Hideyuki Tanaka for setting up a Tilapia demonstration farm in Salani. A joint venture between Mr Leasiolagi Tipi (Salani farm owner) and Fisheries Division.

Up to now, due to unforeseen circumstances the project has yet to be implemented as a result of the Technical consultant (Fijian national) unavailability and recently the unavailability of funds to initiate the project as the SPRADP is no longer operating and allocation of funds for this project is now handled by SPC in which submissions of proposals and other administrative requirements need fulfilled before any funds are made available. Proposals etc have been submitted and no correspondence has been received on the status of this project has been received yet.

Proposed plan of activities : Hold off project until funds have been identified. If funds become allocated, then for the construction of ponds to be implemented before the end of year '92.

#### 2. GIANT CLAMS - SHIPMENT OF 1.5-2yr olds CLAM SEEDS

The 17th July 92 saw the arrival of the first shipment of clams under the "Giant clam rehabilitation programme" from Fiji Fisheries. Altogether a total of 15,000 clams are due to arrive before the end of this year. In the first shipment 5,220 clams

were received consisting of 4,950 Tridacna derasa and 270 T. squamosa shells.

From date of arrival the clams were placed into Fisheries ponds undergoing Quarantine for the period of 3-6months. To date, a count of Live shells in Fisheries ponds is as follows:

T. derasa : 4,169 (16% Mortality %.)

T. squamosa : 60 (78% Mortality %.)

Contaminated seawater supply from point of inlet resulted in a high number of shells found dead during this period. However, daily recordings and checks has showed minimal natural mortality during this period.

Proposed plan of activities :

1. Continue monitoring shells through daily observations and recordings of temp, salinity, appearances of predators, etc.
2. Mid October will mark the period of 3 months since the arrival of the clams. Discussions to be held to allocate an appropriate time for moving of the clam shells to Namu'a. Also the time for next shipment of 10,000 clams through Fiji Fisheries (as to coincide with the new pond????).
3. Through local counterpart to setup Ocean Nursery for when the clams are to be transferred to Namu'a.

### 3. EUCHEUMA SEAWEED PILOT FARM

168kg of Eucheuma cottonii were received on 17/7/92 accompanied by Seaweed farm consultant Mr Samuel Mario from Fiji Fisheries. These underwent a quarantine period of three days and then transferred to Namu'a, Aleipata for planting.

The 21/7 to 24/7/92 were spent establishing a block of seaweed stock in Namu'a. This consisted of planting out 100 lines, 7m in length with pieces of seaweeds. All of the weeds received from Fiji and local stocks were used in this plot. Other materials needed such as polypropylene ropes, rafia and crowbar were brought by the consultant. The 200 mangrove sticks available locally and prepared by the Fisheries staff. During this period an intensive training session was undertaken by the Aquaculture staff through the direction of Mr S Mario for Eucheuma Seaweed Cultivation also the local counterpart received instructions on farm maintenance. The following week was setting up a drying rack in view of post harvest processes.



Three weeks since establishment of the BROODSTOCK PLOT, the local counterpart reported a substantial number of weeds were dying since planting. A survey conducted of the plot by staff quantified 50% of lines planted had dead weeds. These were not of the local stock. At time of planting, a considerable number of seaweeds from the shipment showed signs of exposure to fresh water and were overmature and will lead to weeds dying. From this visit, it was recommended that at the following harvest would be to replant the lost lines. The week of 7/9/92 - 11/7/92 saw to this activity in the reestablishing the BROODSTOCK PLOT for planting of 1,000 lines in the next harvest period.

Next harvest period will be 26/10/92 - 31/10/92 IN WHICH 1,000 LINES (10 BLOCKS) OF SEaweeds WILL BE PLANTED.

Materials needed for setup :

7,000 m of 3 or 4 mm polypropylene rope  
roll of rafia

1,000 of sticks (togo or puluvao)  
sticks are to be 2-2.5in diameter and  
1.5-2m in length

Proposed plan of activities :

Week 1 (14/9 - 18/9/92)	}	- Ordering ropes, rafia etc...
Week 2 (21/9 - 25/9/92)		
Week 3 (28/9 - 2/10/92)		
Week 4 (5/10 - 9/10/92)	}	- Getting ready
Week 5 (12/10 - 16/10/92)		
WEEK 6 (19/10 -	}	1,000 sticks for planting
WEEK 7 (31/10/92)		
		- PLANTING OF 10 BLOCKS!!!