

**REPORT ON CORAL  
REEF MONITORING  
AT SAOLUAFATA  
VILLAGE**

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# **REPORT ON CORAL REEF MONITORING AT SAOLUAFATA VILLAGE.**

## **VILLAGE BACKGROUND**

Saoluafata, a village of approximately 600 people has been working together with the Fisheries Division in managing their marine resources. The village people themselves prepared their Management Plan and approved by the village council on the 23rd. April 1998. The village Fish Reserve of about 180m x 480m was officially declared on the same date.

As part of its on-going management programme workshops were conducted with the villagers mostly the Fisheries Management Committee (FMC) in order to train them with fishing techniques, such as gear demonstration, fish handling, outboard maintenance, giant clams and Tilapia Farming as well as Coral Reef Monitoring.

## **INTRODUCTION.**

This report summarised the first follow-up monitoring programme on coral reef conducted on Friday 5th. 1999. The coral reef monitoring was carried out during low tide of about 1 - 2.5m. The methodology used were UVC and LIT. The programme was attended by five members of the FMC with the officers from the Fisheries Division.

## **UVC FISH COUNTING**

Our monitoring group was divided into two teams. Team A and Team B. Team A worked inside the fish reserve while Team B took samples from outside. Both teams conducted four practical runs of fifty metres each. Species identified were Parrot fish (fuga), Rabbit fish (lo/pauulu/tito), Surgeon fish (pone/palagi) and Butterfly fish (tifitifi). The transects location were distributed among the reserve area. The results showed that the inner transects has more parrot fish and rabbit fish species than the outer transects.

# RESULTS.

## TEAM A.

### TRIAL 1.

NAMES	SPECIES		COMMENTS
	RABBIT FISH	BUTTERFLY FISH	
Voli	11	12	Good results
A. Sola	13	14	
Patele	13	12	Good results
Elisara	10	12	
Elisara	11	10	Away from the transect.
A. Sola	15	19	
Voli	10	10	
Patele	10	9	

### TRIAL 2.

NAMES	SPECIES		COMMENTS
	PARROT FISH	SURGEON FISH	
Voli	28	12	
Elisara	36	10	
Patele	32	21	Needs to control swim
A. Sola	40	15	
Voli	26	13	Good results
Patele	28	15	
A. Sola	34	20	Good results
Elisara	40	18	

### TRIAL 3.

NAMES	SPECIES		COMMENTS
	BUTTERFLY FISH	PARROT FISH	
Voli	25	24	Need more demonstration on mask /snokel.
A. Sola	32	28	
Patele	28	28	
Elisara	36	26	

### TRIAL 4.

NAMES	SPECIES		COMMENTS
	PARROT FISH	RABBIT FISH	
Voli	29	13	Good team work
Patele	27	11	
Elisara	26	20	Good results
A. Sola	24	18	

## TEAM B

### TRAIL 1

NAMES	SPECIES		COMMENTS
	BUTTERFLY FISH	PARROT FISH	
Tala	6	15	Needs to control swim.
Vaivao	4	13	
A. Fereti	5	16	
Taufi	4	19	

### TRIAL 2

NAMES	SPECIES		COMMENTS
	SURGEON FISH	PARROT FISH	
Tala	6	14	Good team work.
Taufi	8	11	
A. Fereti	6	15	Snorkel fell out
Vaivao	11	9	

### TRIAL 3

NAMES	SPECIES		COMMENTS
	BUTTERFLY FISH	PARROT FISH	
Tala	13	16	
A. Fereti	11	11	
Vaivao	9	19	Away from the transect
Taufi	10	15	

### LIT: LINE INTERCEPT TRANSECT

The purpose of this method is to identify changes overtime of the coral growth and the distribution of other benthic organisms. About 1/3 of the Fisheries Reserve area was covered in the monitoring survey. Live corals comprising both Staghorn and Porites species were noted as 55% and Dead corals as 20% with scars present. Few soft corals were also identified as 5% and coral rubble were total up to 20%. The visible substrate was sandy and the visibility was very good. Live corals were healthy with different fish species assemblages on them. Sea cucumber were found in the survey area and the villagers witnessed as one of the good evidence of species recruitment in the Fish Reserve.

## **CONCLUSION**

The area monitored shows good evidence of coral regeneration, especially Acropora and Porites species. Visual surveys of reef fish found regional differences in the fish assemblages in the Fish reserve and outside the reserve. The Fisheries Advisory Committee has been advised to maintain their management plan in order to achieve their goals. It is hoped that, these monitoring surveys will continue by the village people and become more sustainable.

## **LIST OF VILLAGE AND FISHERIES PERSONNEL**

### **Villagers**

Aigamaua Fereti  
Aigamaua Sola  
Vaivao Tusigaigoa  
Elisara Taito

### **Fisheries Officers**

Autalavou Taua  
Patelesio Tualofa  
Voli Sooaemalelagi

## **REFERENCES**

G. R. South, P. A. Skelton and A. Taua (1998) Samoa Village Level Coral Reef Monitoring Pilot Project Training Report.

J. Kallie 1998. Village Fish Reserve Report for Saoluafata.

H. Sweatman, Status Report No. 2, (1997) Long-Term Monitoring of the Great barrier Reef.