

Vanuatu Coral Reef Monitoring Network Project

2004 BI-ANNUAL PROGRESSIVE REPORT
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TABLE OF CONTENTS

1	INTRODUCTION	- 3 -
2	OBJECTIVES OF THE PROJECT	- 3 -
3	THE VANUATU CRMN PROJECT	- 3 -
4	ACTIVITY REPORTS	- 4 -
4.1	Year 2002	- 4 -
4.1.1.	Site Set up.....	- 4 -
4.1.2.	Training	- 4 -
4.2	Year 2003	- 4 -
4.2.1	Repair work on Research Boat	- 4 -
4.2.1	Efate Surveys.....	- 4 -
4.2.2	Lamen Bay and Nikaura, Epi	- 4 -
4.2.3	Marine Fishes of Vanuatu Poster Production	- 5 -
4.2.4	Database.....	- 5 -
4.2.5	Collaboration with other stake holders	- 5 -
4.2.6	Needs.....	- 5 -
4.3	Year 2004	- 6 -
4.3.1	MAC/SRS/VFD Fish survey	- 6 -
4.3.2	FD/VTOA Dive Site Assessment.....	- 6 -
4.3.2	SPC/Fisheries Finfish stock survey/Training	- 6 -
4.3.3	Reef Check Aust/ /VTOA/ VFD Efate Reef Monitoring	- 6 -
4.3.4	Crown-of-Thorns Eradication Campaign	- 7 -
4.3.5	Sites and Resources Surveyed 2002- 2004.....	- 7 -
5	ACTIVITIES PLAN FOR THE NEXT 6 MONTHS	- 7 -
5.1	Reef Check Aust/VTOA/FD Coral monitoring -July 19- Aug 6	- 7 -
5.2	Final CRM Meeting in September-Fiji	- 7 -
5.3	Survey of two Monitoring Sites	- 7 -
5.4	Setting up of new site	- 8 -
6	PROJECT EQUIPMENTS	- 8 -
7	FINANCIAL REPORT	- 8 -
8	CONSTRAINTS	- 9 -
8.1	Staff shortage	- 9 -
8.2	Lack of experience in monitoring techniques	- 9 -
8.3	Database Setup.....	- 9 -
9	CONCLUSION	- 10 -

LIST OF TABLES

Table 1:	Sites and resources Surveyed 2002-2004	- 7 -
Table 2:	Project Equipments List	- 8 -
Table 3:	Total project expenditure.....	- 8 -
Table 4:	Expenditure detail for the last 6 months.....	- 9 -

1 INTRODUCTION

The Vanuatu Coral Reef Monitoring Network Project (VCRMN) is a regional network funded under the Canada South Pacific Ocean Development (CSPOD) programme coordinated by the University of the South Pacific's Institute of Marine Studies at the School of Marine studies Programme (MSP) in Suva Fiji. Under the Global Coral Reef Monitoring Network, the Pacific Node is divided into Polynesian Mana, Micronesian node and South West Pacific Node which covers the Melanesian region. The initiative is a continuation of the former SPREP coordinated coral reef monitoring programme that ended in 1998 without establishing national monitoring programmes in the node member countries.

The South-West Pacific GCRMN node was initiated in 2001 to assist node member countries establish national monitoring programme and provide status of national coral reef environment and resources information to the GCRMN. It's core aim is to strengthened National institutions, Fisheries Departments and marine conservation NGOs in setting up monitoring activities, establishing national database on coral reefs and strengthen local capacity for collection, analysis and dissemination of data; provide training to relevant nationals and organizations; raise community education and awareness and initiate community participation in coral reef conservation.

2 OBJECTIVES OF THE PROJECT

The objectives of the project were to:

- Set up monitoring sites
- Set up a national CRMN database
- Conduct surveys and collection of data
- Establish linkages between government, NGOs and private sector
- Conduct education and awareness on coral reefs
- Provide training on monitoring methods to interested participants
- Provide status of reef reports to the regional node and GCRMN

3 THE VANUATU CRMN PROJECT

The Vanuatu Coral Reef Monitoring Network Project commenced in the early 2002, as a new project coordinated by Kalo Pakoa under the Research Section which was at that time the only Fisheries Section aggregating many small projects from aquaculture and stock assessment activities. With existing shortage of staff in the Section, it was decided that only two permanent monitoring sites were to be set up and monitored throughout the three years project term. In addition, the sites were to be in close proximity to Port Vila for easy accessibility. The sites should represent a high impacted site and a low impact one.

Two coral survey methods were recommended, the AIMS Line Intercept and the Reef Check Technique were tested but the research staffs were more familiar with the reef check method as it is easier compared to the complicated LIT method.

The project was being executed under the Research Section until in early 2003 when it was moved to the Management & Policy Section under the coordinator who is now incharge of the new section and the Project officer who is now Fisheries statistician in the new Section. In anyways, stock assessment and aquaculture are two different fisheries fields that cannot be put together. Therefore this move to take coral reef monitoring away from the Research and Aquaculture Section is a start of the processes to separate the two fields into different sections so that these activities can be more effectively and efficiently executed.

4 ACTIVITY REPORTS

4.1 Year 2002

4.1.1. Site Set up

Two sites, Malapoa Point representing high impact sites (over-fishing, run-off from Takabe River), and Hat Island representing less impacted site were picked as permanent monitoring sites. Both substrate and fish surveys were conducted on the two sites in March and June 2002 respectively and again at the end of 2002. Surveys were done using reef check method as it is much easier and faster than the AIMS LIT method.

2002 survey report prepared by the project officer (Mr Jason Raubani) is available.

4.1.2. Training

The project Officer also completed his open water scuba dive training in that year.

4.2 Year 2003

4.2.1 Repair work on Research Boat

Re-construction of seats and floor of new research fiberglass boat at a cost of VT60,000.

4.2.1 Efate Surveys

Two surveys were done on the sites, in March and again in September. A report has been prepared for the 2003 surveys.

4.2.2 Lamén Bay and Nikaura, Epi

Another survey was executed at Lamén Bay and Nikaura reef on Epi in collaboration with the Youth Challenge International (YCI) Vanuatu. The aim was to introduce reef monitoring (using reef check) to communities, especially those communities who are planning or have established rural based tourism activities such as bungalows and have decided to conserve certain areas of their

reefs. Nikaura was in the process of setting up a community based conservation area which makes it necessary to set up a monitoring site. In addition to the survey, the Officer also conducted awareness to schools and community of both communities on fisheries management and conservation issues.

4.2.3 Marine Fishes of Vanuatu Poster Production

Much time was spend on the production of one of Vanuatu's first comprehensive marine fish poster in collaboration with Mr Larry Sharron of Sustainable Reef Supplies Ltd. The cost of the poster (VT200,000) was met by the Vanuatu Coral Reef Project and the Compliance Project on a 50/50% basis. It is an educational material aimed to generate better understanding of Vanuatu's marine fishes. The poster is now an effective tool in better understanding of fishes and is helping a lot in proper fish identification for the purpose of monitoring activities. The poster is being sold both locally and overseas as cost recovery for the project.

4.2.4 Database

The establishment of the new Management and Policy Section is an initiative to develop and strengthened the Departments data collection, management and data utilization in the management process. This central database is the engine that will develop into other databases such as the coral reef database and stock assessment database etc. Our main effort therefore was to establish the central database first and at the same time train the new statistician in the whole process. Once the central database is functioning and the statistician has acquired the necessary skills, then other databases can be developed when there is an officer in-charge. Although a new computer was purchased for this database set up, this database has yet to be set up when the statistician is ready to do so. At the moment the existing data have been stored in excel files.

4.2.5 Collaboration with other stake holders

One of the primary aims of the project is to strengthened coordination and participation of other stake holders. Since 2003, the two officers have established close collaboration especially with the tourism dive industry on Efate. This was further strengthened by the aquarium trade issues that came up towards the end of 2003. There is now good collaboration with Nautilus Scuba, Sailaway Cruises, and Hideaway Resort, Youth Challenges International and the US Peace Corps-Vanuatu with respect to marine conservationist volunteers in the islands.

4.2.6 Needs

Specific needs identified in the year for more training was fish identification and more experience in underwater survey in order to efficiently carry out fish surveys to carry out the fin fish assessment part of the monitoring. There is also a need for finfish survey specialist in Vanuatu.

4.3 Year 2004

The activities of the last six months were mainly on coordinating efforts and collaboration with other institutions and agencies in conducting various activities of the monitoring. These efforts were centered around marine aquarium trade and development of management plan. With good collaboration with other agencies, we are now beginning to see some good indication of collaborative effort in the monitoring of coral reef resources. As a result, we started to see some sharing of responsibilities and costs between our collaborators, which was one of the expectation. Following are some of the events that have resulted from VCRMN collaborative effort:

4.3.1 MAC/SRS/VFD Fish survey

The fish survey jointly executed by Marine aquarium Council, SRS and VFD was conducted in January under the expense of SRS and MAC. Former project officer who took part in the on the job training acquired first hand skills in fish ID and survey technique. Mr. Jason Raubani has acquired good fish ID skills from the training.

Survey Report is available.

4.3.2 FD/VTOA Dive Site Assessment

Within this collaborative arrangement, a preliminary assessment survey was conducted by Ms Heidi Bartram, FD volunteer during her last month with the Department, with the support of the dive tour operators.

Survey report is available.

4.3.2 SPC/Fisheries Finfish stock survey/Training

The three weeks training and survey was conducted in May 11 to 27 around the aquarium fish collection areas on Efate 2004 and was jointly funded by Vanuatu Coral reef project and SPC. This was the first intensive fish survey training for the two officers incharge of the project and one of the most successful one. The two officers are now well equipped with much better survey skills to execute effective monitoring assessment in future. The survey also identify new sites for coral reef monitoring set up especially at Pukura Reef near Devils Point which so far is one of Efate's most outstanding and undisturbed reef.

Report of fish stock assessment will be out soon

4.3.3 Reef Check Aust/ /VTOA/ VFD Efate Reef Monitoring

This is perhaps one of the most successful offshoot of the Vanuatu Coral Reef Monitoring Project collaborative effort. Working with the Vanuatu Tour Operators Association, the project has once again facilitated an effort to get 12 volunteers from Reef Check Australia and James Cook University who are now in the country conducting an intensive reef monitoring survey on Efate. Funding was provided by Australian High commission, operation was executed by VTOA and coordinated by the Coral Reef Monitoring Programme of the Fisheries Department. Again, costs incurred by the VCRMN project negligible which is a primary goal of the project to establish a sustainable and a stand-alone self funded monitoring program at the end of the project period. It is

also another effort to get resource users to participate on the management and conservation of resources.

4.3.4 Crown-of-Thorns Eradication Campaign

Within the same collaborative effort, the National Biodiversity Project of the Environment Unit provided funding for the crown of thorn clean up campaign in Santo which was successfully executed by Mr. Sompert Gereva of the Research and Aquaculture Section and FD staff in Santo and the community of Aore Island.

Mr. Gereva to prepare a report of the COT campaign

4.3.5 Sites and Resources Surveyed 2002- 2004

Table 1: Sites and resources Surveyed 2002-2004

Year	Site Surveyed	Method	Resource
2002	Malapoa Hat Island	Reef check	Live coral cover, Inverts
2003	Malapoa Hat Island Nikaura and Lamén Bay, Epi	Reef check	Live coral cover inverts
2004	Hat Island, Malapoa Pango Pt, Bukura Devils Pt, Tuktuk, Pauls Rock, Lelepa North, Moso West, Takara, Nguna & More	Reef check, MAQTRAC, SPC- method COT counts	All Live coral cover, substrate, inverts, fish, COT

5 ACTIVITIES PLAN FOR THE NEXT 6 MONTHS

5.1 Reef Check Aust/VTOA/FD Coral monitoring -July 19- Aug 6

This survey is currently underway coordinated by Coral Reef Monitoring Programme. Mr. Mike Lameier, a Peace Corps Volunteer attached between FD and Pango village is currently working with the survey team. Raw data and final report will be given to the Department.

5.2 Final CRM Meeting in September-Fiji

Preparation of status of reef report for presentation and submission in the final coral reef monitoring meeting in September in Fiji. The report will be prepared by Sompert, Jason and Pakoa and one of the three will attend the meeting.

5.3 Survey of two Monitoring Sites

Second lot of annual surveys to be conducted on Hat Island and Malapoa in October this year.

5.4 Setting up of new site

Two additional contrasting sites of Pango point and Pukura will be set up in October. In addition new monitoring site will be setup at Crab Bay on Malekula in collaboration with the IWP project.

6 PROJECT EQUIPMENTS

Table 2: Project Equipments List

Equipment Purchased	Quantity	Status	Needs
Snorkels	4	3 missing, 1 available	-need replacement
Masks	4	3 missing	-
Boots	4	2 missing	-
Wetsuits	4	2 missing	2 tight fit suits
BCDs	4	4 available	-
Regulators	4 incomplete	New	new gauges & oct. / one dive computer
Computer	1	New	
Printer	1	New	

7 FINANCIAL REPORT

Table 3: Total project expenditure

Years	Funs Received VT	Expended	Balance
1 (Jul 01-Jun 02)	1,213,894	616,575	597,319
2 (Jul 02 –Jun 03)	1,213,894	712,897	500,997
3 (Jul 03 – Jun 04)	1,213,894		

Table 4: Expenditure detail for the last 6 months

Head	Budget (VT)	Spend (VT)	Balance (VT)
Provident fund	4,638		4,638
Salary	121,400		121,400
Local courses	25,500		25,500
Fuel	61,745		61,745
Incidentals	41,495		8,505
Local travel	29,790		29,790
Value added Tax			2,846
Equipments-General	155,883		155,883
Equip.-Computer	272,446		272,446
Total	712,897	351,090	682,753

Total remaining balance is vt745, 632.

8 CONSTRAINTS

8.1 Staff shortage

The Project was faced with a set back at the beginning because of the staff shortage in the Research Section. Good coordination was lacking as the coordinator was still away on study leave then. In addition, the load and many responsibilities put on the research staff at that time, effectively diffuse staff efforts on each of the projects, seaweed, trochus and coral reef the section had to implement. Though monitoring was done, there could have been more.

8.2 Lack of experience in monitoring techniques

Successful monitoring is the result of good trained and experience reef monitors. The two staff who were running the project at that time Mr. Gereva and Mr. Raubani tried their very best to conduct surveys without proper coral reef monitoring training. Need for more training in this area was important for the continuation of the programme.

8.3 Database Setup

Database issue was a long standing problem in the Fisheries department. A databases setup by SPC/FFA all failed to be sustained over long term. The problem being that VFD is not yet ready to manage her own database system. With the coral reef project, the need for a national coral reef database was eminent but FD was not ready to develop a database without a fisheries Statistician nor a FD Sections solely responsible for database management etc. Having a reliable database system that can be sustainable need a lot more work. Creating a fly by night database system just to satisfy the needs of the coral reef project is not in the long term interest of Vanuatu Fisheries and coral reef monitoring. Although there are no database yet, initiative has been made to develop a good database under the new Management and Policy Section.

9 CONCLUSION

Despite the challenges, the Vanuatu coral reef monitoring project has been successful in promoting participation of various stake holders in the monitoring network. Efforts being made in 2004 indicate promising future for coral monitoring in Vanuatu. Most importantly is the on the job training by the two staff of the Management and Policy Section in the fish ID and survey as well as database part of it. With all these, it is optimistic that sustainable coral reef monitoring network will be established that will not depend on donor funded projects.

Most notably is the existing negotiation to established relations with volunteer organization such as Reef Check Australian to assist in the monitoring work. We hope to establish an annual coral reef monitoring events to cover Santo and other islands. Collaboration with other stakeholders such as IWP, FSP and others should also be strengthened.

Efate Coral Reef Monitoring Program

2.1. Introduction

This report will briefly summarize the status and activities to be implemented by the Efate Coral Reef Monitoring Program (ECRMP) as the project is at its very early stages of implementation.

The ECRMP is a successful offshoot of the VCRMN as a result of good collaborative effort by the VCRMN with other institution such as the Vanuatu Dive Operators Association and Peace Corps Volunteer.

The aim of the project is to establish a stand alone project to improve the monitoring and management of coral reefs and marine resources on Efate. And in addition to researching the current impact of the aquarium fish collection on the reef environment, permanent monitoring sites will be established for long term monitoring by the Fisheries Department and the Vanuatu Dive Association.

2.2. Status of the project

The ERCCRM kicked started as a short term project commencing from the 15th July to the 10th of August 2004. The project which is funded by Australian High Commission is being implemented collaboratively by the Reef Check Australia, Dive Operators and the Fisheries Department. After the end of the project, the Fisheries Department and the Dive Operators will continue with the project monitoring the sites on an annual basis.

2.3. Activities

The project has started, and the main activities involve includes conducting reef check, aquarium fish survey and setting up permanent monitoring sites on several locations around the main island of Efate and the offshore islands (Appendix A).

2.4. Project Equipments

Table 1: List of equipments

Equipment Purchased	Quantity	Status	Needs
Slates	30	Available	
Measuring Tapes	50	Available	
Underwater Paper	300	Available	

2.5. Financial Report

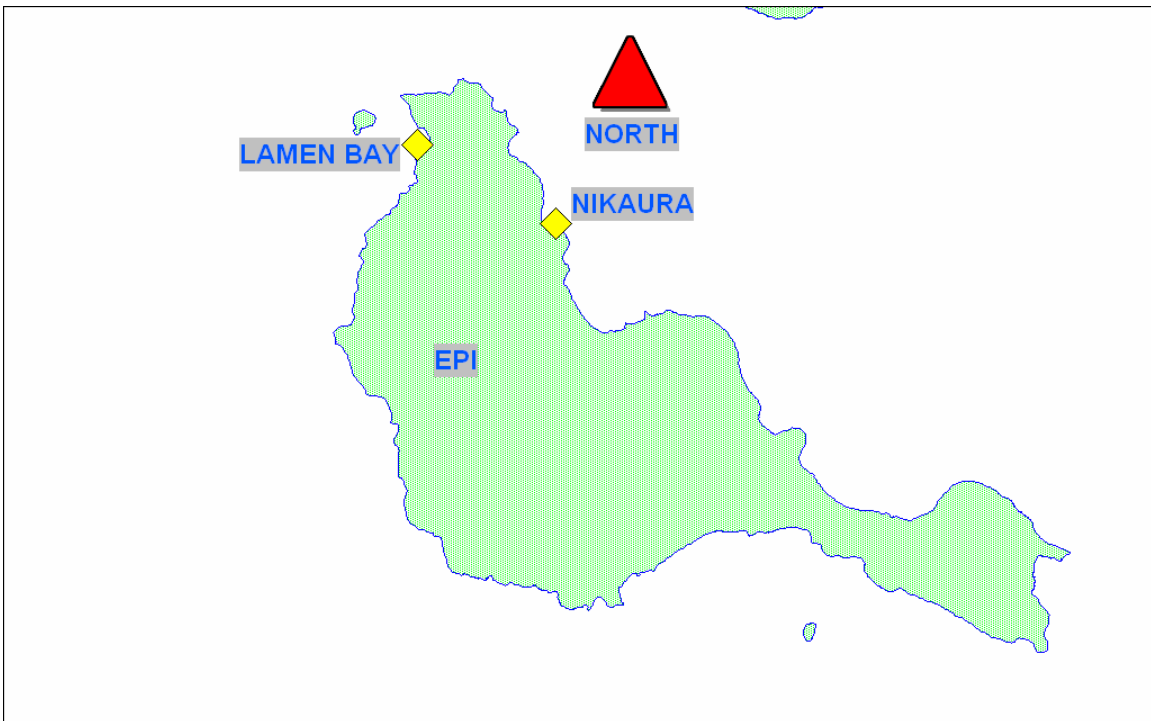
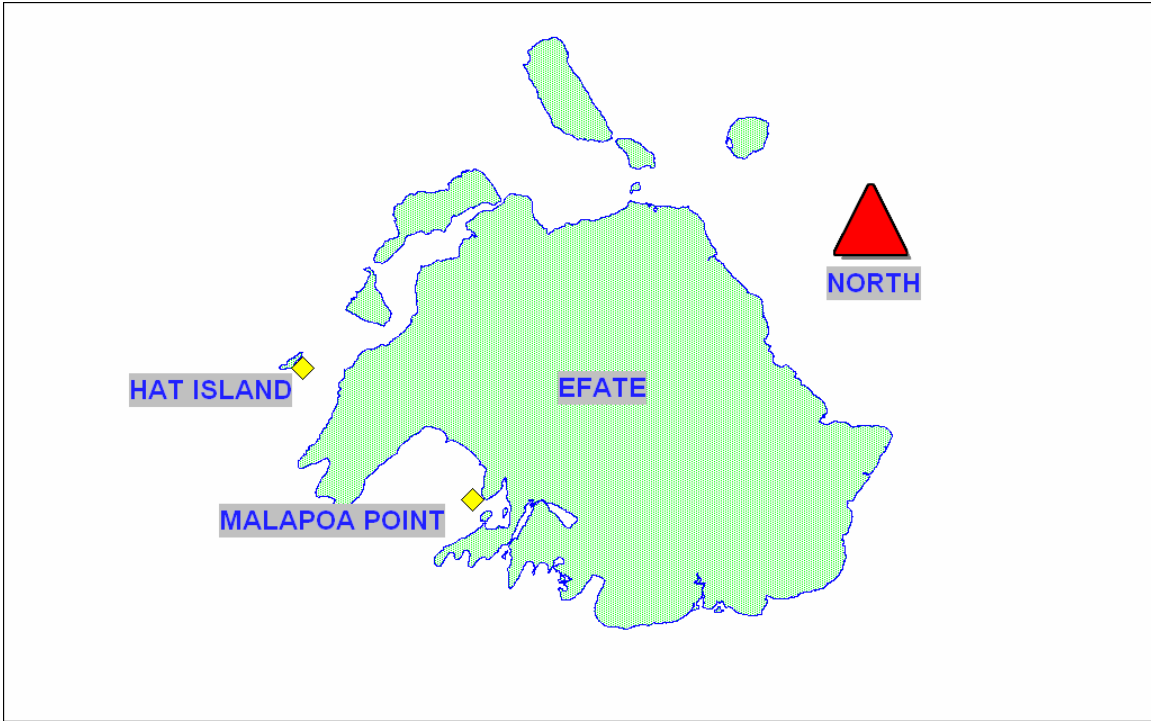
Table 2: Expenditure details

Head	Budget VT	Spend VT	Commitments VT	Balance VT
Consultant fee	150000			150000
Fuel-Vehicle	210000	50000	32454	127546
Local Travel	260000	50000		210000
Communication	16000			16000
Materials-General	150000	100000		50000
Incidentals	630450	211960	66197	352293
Total	1416450	411960	98651	905839

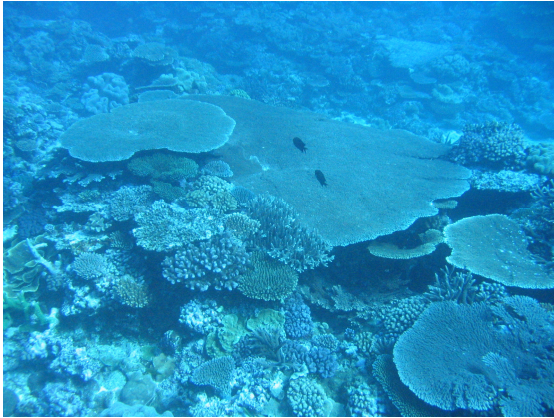
1.6. Conclusion

Since the project has just started and the first monitoring will be completed in a few weeks time, the successful collaboration between the Fisheries Departments and the other stakeholders particularly the Vanuatu Dive Association has shown a good start of the project and hope that this collaborative effort will result in a successful stand alone Efate coral reef project.

Appendix A



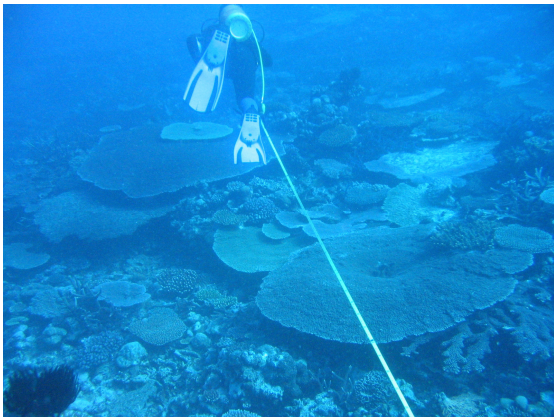
Map of Efate and Epi Island showing the monitoring sites.



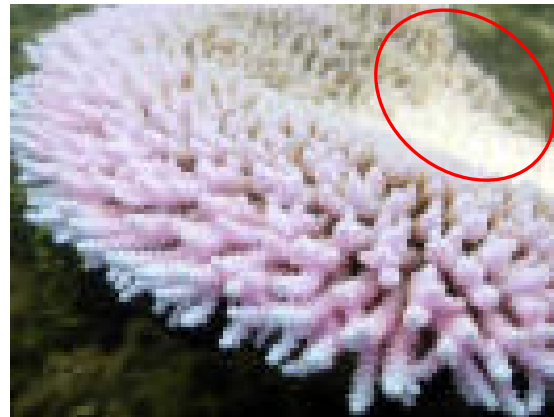
A.



B.



C.



D.

A: Picture shows a good coral cover

B: Clown fish (*Amphiprion clarki*), one of the many species targeted by aquarium trade industry.

C: Assessing and monitoring the reef environment.

D: Picture shows part of a live coral being bleached. Bleaching is one of the environmental events that contribute to mass coral dead.