Samoa Fisheries staff as well as the Vanuatu node. It highlights the potential gain that could be obtained if Pacific Island researchers worked collaboratively. The experience gained by Samoa Fisheries staff will be extremely useful in future stock enhancement work.

Community-based Fisheries Management Plan

The three seeding sites selected for the trochus project are managed under the country Community-based Fisheries Management Plan. Management of the trochus project has been incorporated into the daily activities of the three communities currently participating in the Community-based Fisheries Management Program. Some of these communities outlined in their management plans the need for alternative developments in their coastal areas. Such developments included the introduction of potential

species for culture and stock enhancement to alleviate fishing on the already heavily fished reefs. An article providing details of the Community-based Fisheries Management Plan for trochus in Samoa will be published in the next issue of this bulletin.

Conclusion

Participation of the Samoa Fisheries staff in the ACIAR-funded trochus project has been extremely beneficial to the research staff involved. It provides opportunities to interact with regional and Australian researchers, and allows capacity building in the area of stock enhancement and hatchery production. We will be providing further reports on the progress of our work in future editions of this bulletin, including news of the first successful trochus spawning that occurred at the Toloa hatchery in August 2003.



The Kimberley Aquaculture Aboriginal Corporation (KAAC) story: A snapshot of development of the Manbana Hatchery and Discovery Centre

Charla Clements¹ and Chan L. Lee²

The indigenous communities in the Broome region of Australia became involved in trochus research in 1993 when Dr Chan Lee, a senior lecturer at the Northern Territory University commenced work in One Arm Point (OAP), Broome. At that time, indigenous communities in OAP expressed considerable interest in being involved in trochus and other aquaculture activities as a means of achieving economic independence. In 1995, ACIAR supported Chan's work with the communities by funding a three-year trochus project involving Australia, Indonesia and Vanuatu; this was subsequently expanded to include Samoa in the 2002 phase of the project. Over the past eight years, ACIAR has continued to be a strong and highly supportive partner in the trochus work in Kimberley and the Pacific. This commitment has provided the impetus to efforts of the Western Australia Department of Fisheries, the Australian Torres Straits Islander Commission (ATSIC), ATSIC Regional Councils, Department of Commerce and Trade and other agencies in Western Australia to expedite the involvement of indigenous communities in aqua-

culture development in the Kimberley.

As a result of the collaborative efforts by these agencies, significant research and community outcomes were achieved, including:

- Standardising spawning and hatchery production techniques for trochus
- Supporting hatchery development in communities in Australia, Indonesian, Vanuatu and Samoa
- Studies examining the nutritional requirements of hatchery reared juveniles
- Rigorous stock enhancement work using hatchery produced juveniles and seeding with broodstock
- Incorporation of the Kimberley Aquaculture Aboriginal Corporation (KAAC) in 1996
- Establishment of the OAP community-based hatchery
- Supported funding and construction of the \$3.5 million multi-species hatchery (Manbana Hatchery and Discovery Centre) in Broome
- Funding nine trainees and a community aquaculture project officer to work with KAAC and the communities

KAAC

^{2.} Project Coordinator and corresponding author: clee8777@bigpond.net.au

Securing 21 aquaculture licenses for indigenous communities in the Kimberley to participate in trochus, giant clams and tropical abalone farming.

This snapshot report on the development of the Manbana Hatchery and Discovery Centre provides some pictorial views of the construction and completion of the project. It clearly highlights that consistent support and taking a long-term view in working with indigenous people can deliver significant outcomes and benefits to the people.

We hope this snapshot report will provide and encourage other funding bodies and researchers to take up the challenges of working with and developing aquaculture projects in indigenous communities in Australia and in Pacific Island nations.





At the beginning, there was nothing.



The Chair of KAAC (2nd from left) and the WA Minister of Fisheries (3rd from left) visited the hatchery site.



Hatchery and Discovery Centre taking shape.



Manbana Hatchery and Discovery Centre completed.



Entrance to Manbana Hatchery and Discovery Centre.



Staff and a trochus shell display in Manbana.



The three hatchery production tunnels. Each tunnel occupies an area of 400 m².



View of water storage tanks and facilities supporting the hatchery tunnels.



Inside view of hatchery tunnel.



Close-up view of spawning tanks.



Inside view of spawning room.



Inside view of the microalgae laboratory.