



Book of Abstracts

THE 3rd INTERNATIONAL SYMPOSIUM
OF MARINE AND FISHERIES

**"Strengthening Innovation for
Aquatic Resource Management"**

Makassar, 6th June 2020

SCOPUS - INDEXED PROCEEDINGS

Group 2:**(B) Aquatic Ecology dan Conservation**

Time	Code	Speaker	Title
Parallel Session 1			
13:00-14:00	B1	Irman Rumengan	The Potential For Recovery of Coral Habitats In Marine Protected Area Kofiau - Boo Islands, Birds Head Seascape
	B2	Annita Sari	Water Quality Study and Pollution index based on Physics-Chemical Parameters In the Youtefa Bay Tourism Area, Jayapura
	B3	Agus Indarjo	The Growth Model Composition of Giant Prawns (<i>Macrobrachium rosenbergii</i>) in Muara Tepian Sembakung, Nunukan
	B4	Gazali Salim	Allometric Growth and Condition Index Comparison of White Shrimp (<i>Litopenaeus vannamei</i>) from Fishpond and Juata Laut Waters, Tarakan (Indonesia)
Time	Code	Speaker	Title
Parallel Session 2			
14:00-15:00	B5	Annita Sari	Identification And Composition of Fish Types in The Youtefa Bay Tourism Area
	B6	Mohammad Syakir	Effectiveness Study of Scrap Material Used for Nursery Racks at Coral Transplantation Program in Makakata Beach - South Batui , Banggai Regency - Central Sulawesi
	B7	Andi Niartiningsih	Improving the quality of tridacnid clam juveniles through crossbreeding broodstock from different zones across the Spermonde Archipelago
	B8	Aidah A. A. Husain	Do herbivore reef fishes have their own different regimes
Time	Code	Speaker	Title
Parallel Session 3			
15:30-16:30	B9	Natsir Nessa	The Role of Women in the Utilization of Enhalus acoroides: Livelihoods, Food Security, Impacts and Implications for Coastal Area Management
	B10	Syafyudin Yusuf	Coral Reef Biodiveristy and Habitat Coverage Dynamic in Turbid Water Nothern Bone Bay, Coral Triangle Indonesia
	B11	Abigail Mary Moore	Microhabitat preference of the Banggai cardinalfish (<i>Pterapogon kauderni</i>): a behavioural experimental approach
16:30 – 17:00	Closing ceremony for international symposium		

[B6]

**EFFECTIVENESS STUDY OF SCRAP MATERIAL USED FOR NURSERY RACKS
AT CORAL TRANSPLANTATION PROGRAM IN MAKAKATA BEACH - SOUTH
BATUI, BANGGAI REGENCY - CENTRAL SULAWESI**

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ABSTRACT

Coral transplantation program is a biodiversity-environmental programs of JOB Tomori that had started since 2010. A total of 9600 coral seedlings were successfully planted and bred to improve the coral reefs condition around JOB-Tomor's field of operations and succeeded in increasing about 9250m² of the coral reefs area. Some innovations programs, more effective and beneficial, had been carried out. One of it was by using scrap material from remain construction and production activity such as iron scrap, steel packaging, and others for creating nursery racks in Makakata Beach while in Tiaka field by using the new material. The effectiveness of the rack was analyzed by looking at 1) the coral seedlings survival rate and 2) the cost effectiveness. Results showed that Makakata coral transplantation program had a lower survival rate (about 60%) but more effective in term of cost effectiveness (75%) compare to Tiaka Field. The Makakata transplantation program also resulted an additional benefit, such as in increasing community's knowledge and income through Ecotourism and Education program.

Keywords: coral transplantation, survival rate, cost effectiveness, biodiversity

Effectiveness study of scrap material used for nursery racks at Coral Transplantation program in Makakata beach - South Batui , Banggai Regency - Central Sulawesi

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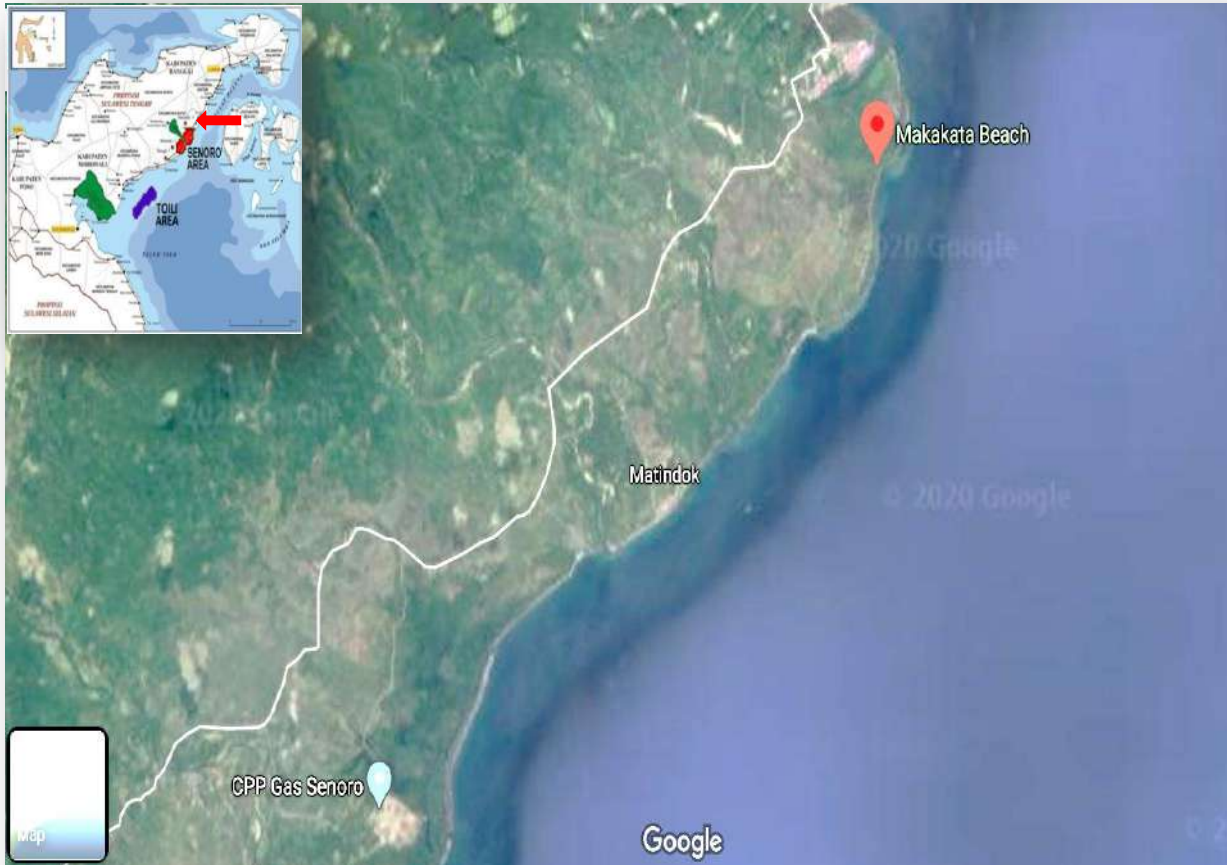


INTRODUCTION

- ❑ **JOB Tomori** is one of the Contractors for the Cooperation of the Upstream Oil and Gas Special task force Unit (KKKS SKK MIGAS) started operating since 2004
- ❑ Coral transplantation program has been running since 2010 and up to now there have been 6 phases of the coral transplantation program
- ❑ Challenge from the top management to evaluate the effectiveness of the program
- ❑ The Makakata Coral Transplantation Program is an alternative program initiated to try to address the concerns and existing problems



METHODS

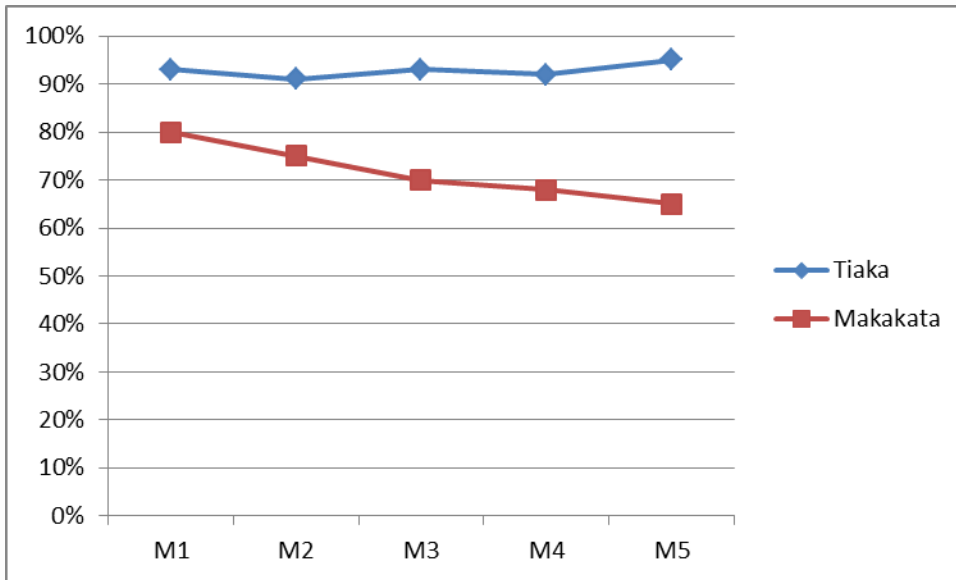


- ❑ Program was conducted from Desember 2018 to September 2019 at Makakata beach – Banggai regency
- ❑ Nursery racks made from scraps material from remain of production and construction activities
- ❑ The effectiveness of the rack was analyzed by looking at (1) the coral seedlings survival rate and (2) the cost effectiveness
- ❑ Monitoring and evaluation

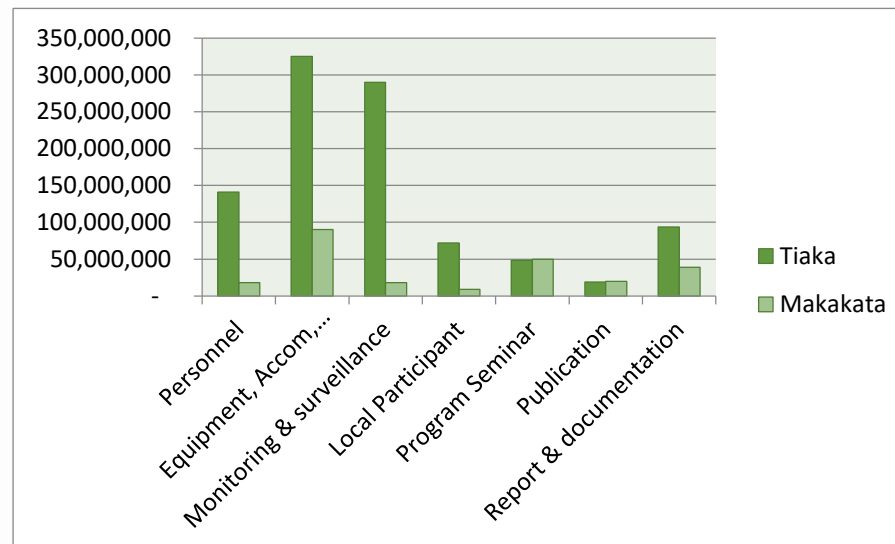
Field activities



Results and Discussion



- ❑ **The Survival Rate of Makakata program is about 65% while in Tiaka Program reach to 95% (30% lower)**
- ❑ **Makakata Program has lower cost compared to Tiaka Program (75% lower)**
- ❑ **Base on interview with local government and the community, they put more hope for the development of Makakata beach as local tourism destination**



Conclusion and Recommendation

- ❑ Coral transplantation program at Makakata beach has a lower Survival Rate but in term of cost effectiveness it can save budget up to 75% compared to program at Tiaka Field.
- ❑ To increase the survival rate of Makakata program, experts can be invited to assist the program and can conduct the training program.
- ❑ By collaboration between local government, communities and the companies, Makakata beach can be developed for become Eco and Education tourism destination program.





Thank you
Terima kasih



JOINT OPERATING BODY
PERTAMINA - MEDCO E&P TOMORI SULAWESI



Effectiveness study of scrap material used for nursery racks at Coral Transplantation program in Makakata beach - South Batui , Banggai Regency - Central Sulawesi

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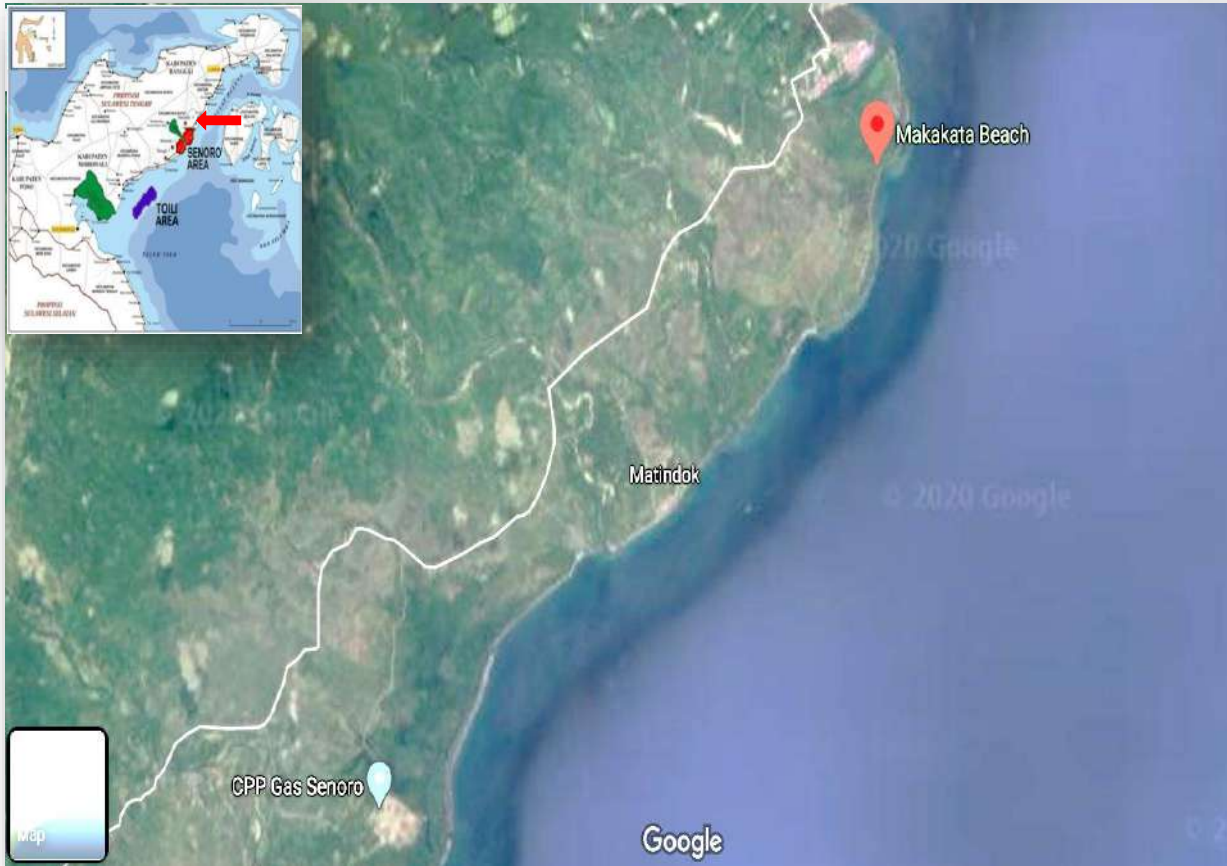


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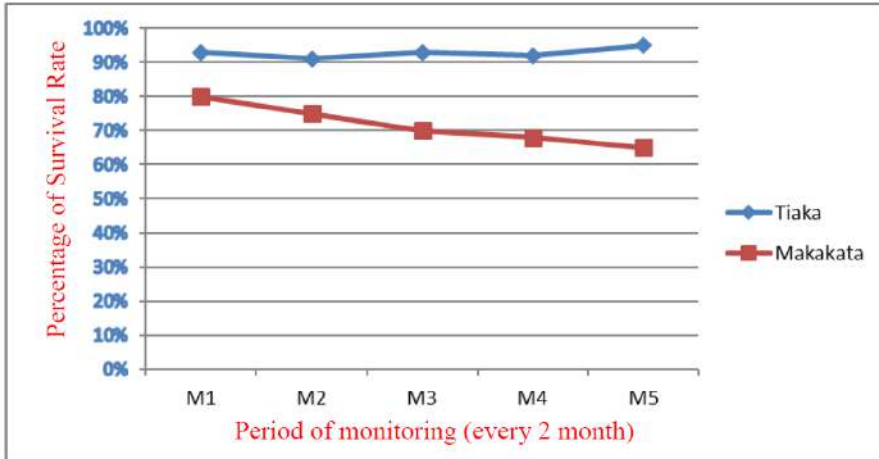


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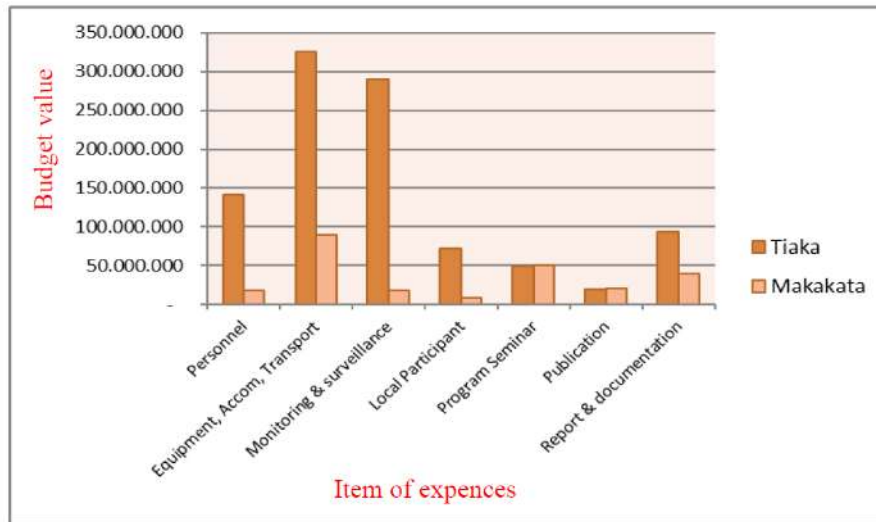
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CERTIFICATE

Presented to
Mohammad Syakir

as a Presenter

at the 3rd International Symposium on Marine and Fisheries,
Faculty of Marine Science and Fisheries , Universitas Hasanuddin
“*Strengthening Innovations for Aquatic Resource Management*”
conducted virtually due to the covid 19 pandemic

Makassar, 6th June 2020



Dr. Ir. St. Aisjah Farhum, M.Si.

Dean



Dr. Mahatma Lanuru, ST., M.Sc.

Head of Organizing Committee

