

**FINAL REPORT**  
**PNBP KAMPUS MERDEKA BELAJAR DALAM DAN LUAR NEGERI**



**ECONOMIC VALUATION OF MANGROVE TOURISM SERVICES  
FOR CONSERVATION AND SUSTAINABLE MANAGEMENT: A CASE  
STUDY IN SINJAI DISTRICT, SOUTH SULAWESI, INDONESIA**

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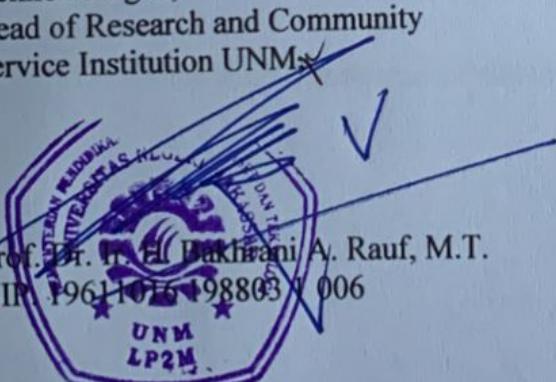
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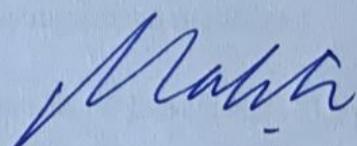
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## SUMMARY

Valuation of the economic value of mangrove tourism services threatened by the development of aquaculture ponds and expansion of settlements is critical as input and consideration for integrating ecological perspectives and economic concerns in decision making. This research aims to estimate the economic value of the services of the Tongke-Tongke mangrove tourism area, Sinjai Regency, South Sulawesi, for conservation and sustainable management.

The research data was collected from a survey of households and visitors. One hundred ten households were selected by a Purposive Sampling method, while 102 visitors were chosen by an Accidental Sampling method during the survey conducted. To estimate the economic value of the mangrove tourism area, we used the market price method for direct use of mangroves, travel cost method (TCM), and Contingent Valuation Method (CVM) for recreational and conservation values.

We estimated that the mangrove tourism area's total economic value (TEV) was about 35.16 million rupiahs (2.48 thousand USD) per year per hectare. The highest value derived from recreational value (34.4 million rupiahs = 2.43 thousand USD) per year per hectare, and followed by fishery products (629 thousand rupiahs = 44 USD) per year per hectare, and from CVM value (48 thousand rupiahs = 3 USD) per year per hectare. Mangrove area of Tongke-Tongke have the experience of being part of a famous mangrove tourism destination in South Sulawesi province in the recent decades. Many visitors in this mangrove tourism area are willing to pay for conserving and preserving this mangrove area. This is one of the exciting potentials of tourism that can be developed by local stakeholders and managed by the local people. Therefore, more attention from stakeholders and decision makers is needed to facilitate implementation of appropriate actions of conserving and restoring mangrove areas that have been lost from over-exploitation (mangrove cutting and aquaculture development) in this region. It is of high priority to maintain and possibly increase mangrove economic values, tourism, and sustainable use.

These findings may become a reference and consideration for stakeholders and policymakers in decision-making for conservation and sustainable management of mangroves and economic development based on the environment in this area.

This research has produced a scientific article (status = *submitted*) for publishing in a reputable international journal and an intellectual property right of a map mangrove tourism area of Tongke-Tongke (status: *submitted*).

## RINGKASAN

Valuasi nilai ekonomi jasa wisata mangrove yang terancam oleh pengembangan tambak budaya dan perluasan pemukiman sangat penting sebagai bahan masukan dan pertimbangan untuk mengintegrasikan perspektif ekologi dan pertimbangan ekonomi dalam pengambilan keputusan. Penelitian ini bertujuan untuk memperkirakan nilai ekonomi jasa kawasan wisata mangrove Tongke-Tongke, Kabupaten Sinjai, Sulawesi Selatan untuk konservasi dan pengelolaan berkelanjutan.

Data penelitian dikumpulkan dari survei rumah tangga dan pengunjung/turis. Seratus sepuluh rumah tangga dipilih dengan metode Purposive Sampling, sedangkan 102 pengunjung dipilih dengan metode Accidental Sampling selama survei dilakukan. Untuk mengestimasi nilai ekonomi kawasan wisata mangrove, digunakan metode harga pasar (market price) untuk pemanfaatan mangrove secara langsung, metode biaya perjalanan (travel cost method/TCM), dan metode penilaian kontinjensi (contingent valuation method/CVM) untuk nilai ekonomi rekreasi dan konservasi.

Kami memperkirakan total nilai ekonomi (TEV) kawasan wisata mangrove adalah sekitar 35,16 juta rupiah (2,48 ribu USD) per tahun per hektar. Nilai tertinggi diperoleh dari nilai rekreasi (Rp 34,4 juta = 2,43 ribu USD) per tahun per hektar, diikuti oleh hasil perikanan (629 ribu rupiah = 44 USD) per tahun per hektar, dan dari nilai CVM (Rp 48 ribu = 3 USD) per tahun per hektar. Tongke-Tongke memiliki pengalaman menjadi bagian dari tujuan wisata mangrove yang terkenal di provinsi Sulawesi Selatan dalam beberapa dekade terakhir. Banyak pengunjung di kawasan wisata mangrove ini rela mengeluarkan biaya untuk menjaga dan melestarikan kawasan mangrove ini. Inilah salah satu potensi wisata yang menarik yang dapat dikembangkan oleh pemangku kepentingan lokal dan dikelola oleh masyarakat setempat. Oleh karena itu, perhatian lebih dari pemangku kepentingan dan pengambil keputusan diperlukan untuk memfasilitasi pelaksanaan tindakan yang tepat untuk melestarikan dan memulihkan kawasan mangrove yang telah hilang dari eksplorasi berlebihan (penebangan mangrove dan pengembangan budidaya) di wilayah ini. Ini adalah prioritas tinggi untuk mempertahankan dan mungkin meningkatkan nilai ekonomi mangrove, pariwisata, dan pemanfaatan yang berkelanjutan

Temuan ini dapat menjadi acuan dan pertimbangan bagi para pemangku kepentingan dan pengambil kebijakan dalam pengambilan keputusan untuk konservasi dan pengelolaan mangrove yang berkelanjutan serta pembangunan ekonomi berbasis lingkungan di kawasan ini.

Penelitian ini telah menghasilkan artikel ilmiah (status: *submitted*) untuk diterbitkan di jurnal internasional bereputasi dan hak cipta berupa peta kawasan wisata mangrove Tongke-Tongke (status: *submitted*).

## PREFACE

Thank God, we pray to the presence of Allah SWT for His mercy and grace, the final research report of the PNBP research “Kampus Merdeka Belajar Dalam dan Luar Negeri scheme Universitas Negeri Makassar (UNM)” with entitled *Economic Valuation of Mangrove Tourism Services for Conservation and Sustainable Management: A Case Study in Sinjai District, South Sulawesi, Indonesia* can be completed.

This research was conducted with researchers from the University of Hawaii (USA) and Hasanuddin University. This research aims to estimate the economic value of the mangrove tourism area of Tongke-Tonke, Sinjai District, South Sulawesi for suggestions and consideration of conservation efforts and sustainable mangrove management. This research has produced a scientific article for publishing in reputable international journals and intellectual property rights in maps of the mangrove tourism area of Tongke-Tongke.

We want to thank the Universitas Negeri Makassar for funding this research. We also thank the Government of Sinjai District for their assistance and support so that this research can be carried out correctly. To the UNM Research and Community Service Institute for facilitating and managing the administration of this research. Also, thank the Department of Geography, Faculty of Mathematics and Natural Sciences UNM for their support for this research.

We realize that this final research report still has shortcomings. Therefore, suggestions and criticisms are highly expected to improve the quality of this report.

Makassar, 12 November 2021

Researchers

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## 1. INTRODUCTION

Tourism is one of the essential services provided by mangrove forests (Carandang et al., 2013; Malik et al., 2019) that contributed significantly to the livelihood of local communities and the tourism industry (Ly and Bauer, 2014). Mondino and Beery (2018) revealed that tourism based on nature (such as mangrove tourism areas) provides opportunities for tourists to learn about the environment, local culture and contribute to preserving biodiversity and the economic development of communities around the tourism area. However, over recent decades, being highly dependent upon mangroves for many purposes has generated high levels of exploitation, deforestation, biodiversity loss, and threats to tourist attractions and business of tourism services (Malik et al., 2019). Hakim (2017) demonstrated that the change of habitat, degradation, and deforestation due to conversion to other land uses has consequences in reducing reproduction success and declining population survival, and leading to species and population disappear. Many wildlife inhabiting mangrove areas, such as mammals, reptiles, and birds, will seek refuge and new habitat.

In the Sinjai District, South Sulawesi province, the mangroves used for tourism have expanded since 1995 (Ayu Lestari et al., 2019). Mangrove tourism areas provide tourist attractions, such as mangrove tracking, mangrove learning and rehabilitation, fishing, bird watching, spots for pre-wedding and selfie photoshoots, culinary, and gazebo with an ocean view for relaxation of tourists (Malik et al., 2017).



Figure 1. Deforested mangrove area for expansion of and aquaculture pond (A) and settlement (B) in the mangrove tourism area of Sinjai District (Malik et al., 2020)

Although mangrove tourism areas provide many services and mangrove rehabilitation actions have been implemented since 1984 by the local community's initiative (Amri, 2008), mangrove clearing for aquaculture ponds and settlement expansions are still happening in this area (Figure 1). It has impacted mangrove area decline, biodiversity loss, and carbon emissions (Malik et al., 2020), and threats to tourism areas. The lack of awareness and understanding of mangrove ecosystem services and benefit values causes these factors to have been mostly not calculated and even ignored in policy-making. Decision making commonly based on assumptions of larger net benefits without considering the loss of broader mangrove services and natural capital stocks (Brander et al., 2012).

Given these critical issues, the research aims are to estimate the economic value of mangrove tourism services for conservation and sustainable management in Sinjai District, South Sulawesi, as a case study. Evaluation of the economic value of mangrove services affected by aquaculture ponds and settlement expansions is essential as a vehicle to integrate both ecological perspectives and economic considerations. It is a way to increase the understanding and awareness among stakeholders and policymakers of the importance of the mangrove ecosystem for conservation, sustainability, and environmentally friendly economic development.

## **2. LITERATURE REVIEW**

Mangrove forests are one of the most valuable and productive coastal ecosystems as they provide a variety of products and ecosystem services that contribute significantly to the community's livelihoods (Malik et al., 2015; Himes-Cornell et al., 2018; Ellison et al. 2020). Mangroves provide fishery and forest products such as fish, shrimp, crab, fuelwood, fruits, and nipa handicrafts (Malik et al., 2015, 2017; Dahdouh-Guebas et al., 2020; Ellison et al., 2020). They also provide various regulating ecosystem services such as coastal protection, protection from seawater intrusion, and carbon storage and sequestration (Malik et al., 2015; Suharti et al., 2016). Mangroves also maintain cultural mangrove ecosystem services such as tourism, aesthetic and spiritual values (Spalding and Parret, 2019), and supporting ecosystem services such as breeding and nursery habitats for fish species (Getzner & Islam, 2020).

The development of mangrove tourism areas had a significant increase in the last few decades in Indonesia. The tourism activities integrate with education, conservation of natural resources, biodiversity, and empowering local communities (Meyer, 2009). Therefore, the damage to natural resources, the decrease in the diversity of flora and fauna, and the poverty of local communities, which is a big issue in Indonesia and various parts of the world, can be prevented or minimized to realize efforts sustainable development can be achieved.

Although mangroves provide various products and tourism services, mangroves have been under great pressure due to decision-making commonly based on assumptions of larger net benefits without considering the loss of broader mangrove services (Barbier, 1993) and natural capital stocks (Brander et al., 2012). Mangrove products and services are often undervalued (Rönnbäck, 1999; Barbier et al., 2008) or even ignored in the economy and by industry and local inhabitants (Vo et al., 2012). Consequently, nearly half of the total mangrove areas globally have been lost over the past decades, with the most significant areas of decline in Asia (Richard and Friess, 2016). In Indonesia, mangroves are threatened primarily by aquaculture and overharvesting of timber, firewood collection, charcoal production, and conversion to other land use such as agriculture, urbanization, mining, and salt ponds (Kusmana, 2014). Mangrove areas are characterized by some of the most rapid loss rates of coastal ecosystems in Indonesia; from 1980 to 2003, at least 1.1 million hectares of mangrove were lost, with 75 % of these areas being converted to shrimp ponds (Bakosurtanal, 2009). High economic revenues from the increase in

exports and foreign trade in shrimp have become the main driving forces for expanding shrimp ponds by clearing mangroves (Malik et al., 2015).

Evaluation of the value of mangrove tourism services is essential. It is a vehicle to integrate both ecological perspectives and economic considerations (Che, 2004). Such an evaluation will support reliable instruments that can be used to shift focus towards a green economy and guide policymakers to make sustainable decisions about mangrove utilization (Beaumont et al., 2008). Besides, it is one way to increase knowledge and awareness among stakeholders of the importance of the mangrove ecosystem for sustainable and environmentally friendly economic development (Samonte-Tan et al., 2007).

Economic valuations of mangrove tourism services have been conducted in many geographical areas of the world. Carandang et al. (2013) estimated the total economic value of mangrove tourism services in Bohol and Palawan, Philipines was 1039 USD/year/ha and 686 USD/year/ha, respectively, using travel cost method (TCM) and contingent valuation method (CVM). Nobi et al. (2021) calculated that the annual economic contribution of tourism in the Sundarban mangroves to the Bangladesh economy was 53 million USD/year using the zonal travel cost method (ZTCM). Pascal (2014) reported that the economic value of mangrove tourism in Vanuatu was 47 thousand USD/year.

### 3. RESEARCH METHODS

#### 3.1. Study Area

The research project was conducted in the mangrove area of Sinjai District, South Sulawesi, focusing on mangroves tourism areas in Tongke-Tongke. The study area located at 5°8' - 5°10' S. and 120°15' - 120°17' E., bordering with the North Sinjai sub-District in the North, the Bone Bay in the East, the Tellu Limpoe sub-District in the South, and the South Sinjai and Central Sinjai sub-Districts in the West (Figure 2).

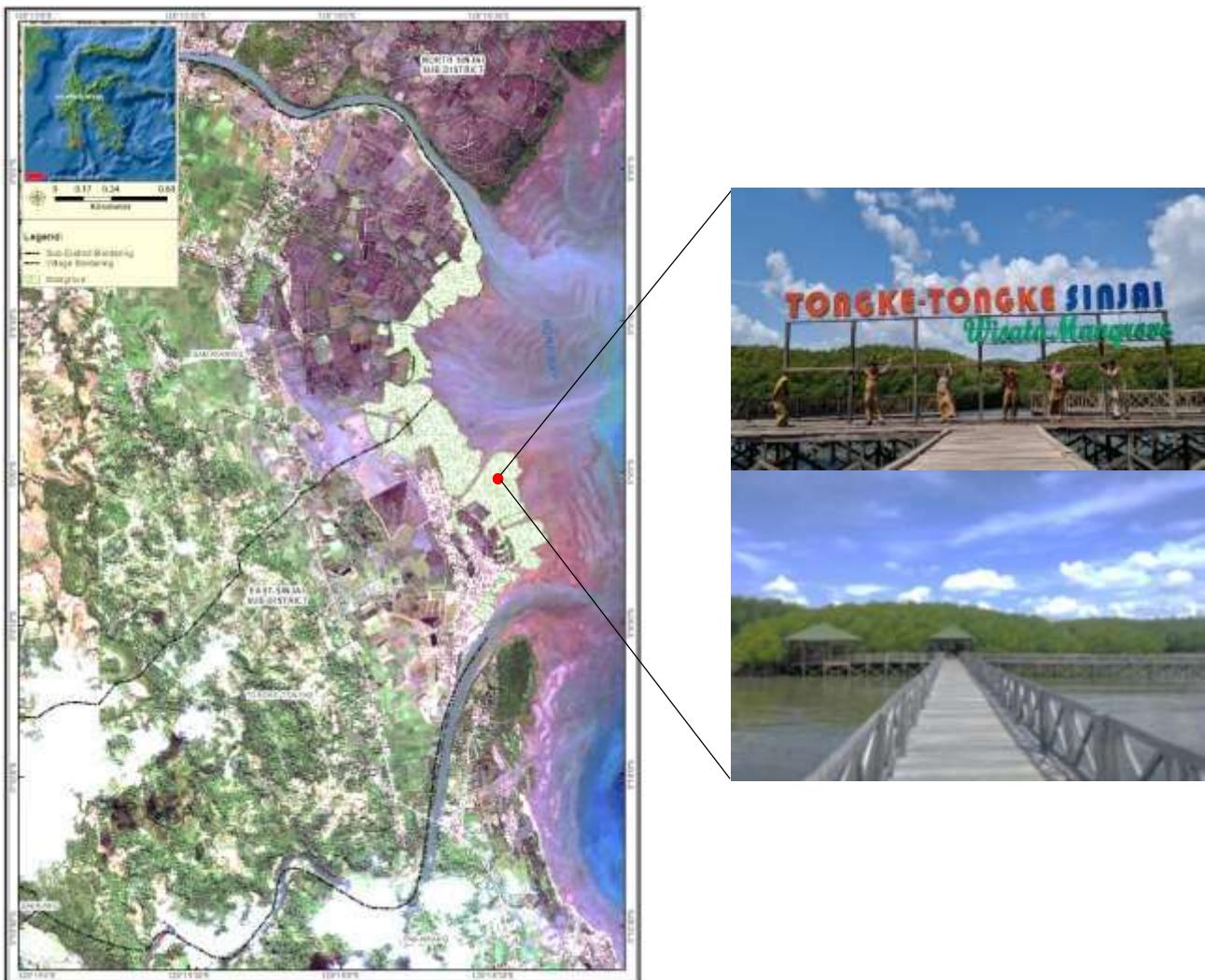


Figure 2. Study area: Mangrove tourism area in Tongke-Tongke village, Sinjai District, South Sulawesi Province.

The mangrove covers areas in Tongke-Tongke villages is about 126 ha (BPS Kabupaten Sinjai, 2018), and *Rhizophora* sp. is the dominant species (Suharti et al., 2016; Malik et al., 2020).

### **3.2. Data collection and analysis**

To estimate the total economic value of the mangrove tourism area, we used the market price method for direct use of mangroves, and Travel Cost Method (TCM), and Contingent Valuation Method (CVM) for recreational and conservation values, respectively (Carandang et al., 2013; Lynham et al., 2015).

The data will be produced from a survey of households who live around the mangrove ecotourism area and visitors, either local or foreign visitors (Carandang et al., 2013). The type of households questions included in the survey will relate to age, the number of dependents, education, livelihood and income, understanding of mangrove functions and benefits, details of the use of mangrove forests (e.g., frequency of use), and the maximum amount they would have been willing to pay (WTP) for the conservation of mangrove tourism area. The households will be selected by a Purposive Sampling method, which directs relation to, and dependence on, mangrove forests, such as fishermen, aquaculture farmers, and firewood collectors. In the meanwhile, the type of visitors questions will also have linked to age, the number of dependents, education, income, and the travel cost of visitors (cost of transportation to and from the site, meals, and parking) (Carandang et al., 2013; Lynham et al., 2015) and selected by the Accidental Sampling method during the survey conduct.

WTP formulas: (Idrus et al., 2016)

$$EWTP = \sum_{i=0}^n W_i P_{fi} \quad (1)$$

$$TWTP = \sum_{i=0}^n WTP_i - \frac{n_i}{N} P \quad (2)$$

Where EWTP is the alleged value of the average WTP; TWTP is the total of WTP;  $W_i$  is WTP value to  $i$ ;  $P_{fi}$  is relative frequency;  $WTP_i$  is WTP respondents to  $i$ ;  $N$  is the number of respondents; and  $n_i$  is the number of respondents to  $i$  that willingness to pay for the service;  $P$  number of population.

## 4. RESULTS AND DISCUSSION

### 4.1.1. Market survey: Direct use of mangroves

This research has presented ecotourism values from mangrove areas in Tongke-Tongke village of Sinjai District, South Sulawesi. The major mangrove products collected by Households are various fishery products, including fish, polyculture (shrimp and milkfish products), and polyculture (milkfish and seaweed products). They do not use mangrove wood for fuelwood because they have converted it to gas for cooking.

Generally, the fisherman captures fish 20 times or days in a month with an average of 4 kg per day. With the market price of 20 thousand rupiahs, the value of benefits for this product was 132.8 million per month or in a year (fish capturing optimal is nine months) was 1,195 billion rupiahs (84 thousand USD). Each fishermen's household can obtain 14.4 million rupiahs (1.01 thousand USD) per year. With the total area of mangrove 126 ha, the economic value from this product was estimated at 114 thousand rupiahs (8 USD) per year per hectare (Table 1).

Table 1. The economic value of mangrove for fishery products

Fishery Product	Number of HH	Frequency	Production (Kg)	Price/kg (in Rp ×1000)	Benefit value (in Rp ×1000)	Total benefit value/year (in Rp × 1000)	Total benefit value/year (in USD × 1000)	Total benefit value / HH/year (in Rp ×1000)	Total benefit value / HH/year (in USD ×1000)	Total benefit value / year/ha (in Rp ×1000)	Total benefit value/ year/ha (in USD×1000)
Fish	83	20x/month	4/days	20	132,800	1,195,200	84	14,400	1.01	114	0.008
Polyculture (Shrimp+ Milkfish)	17	2×/year	4×/year	100    300    60    15	204,000    306,000	510,000	36	30,000	2.11	238	0.017
Polyculture (Milkfish+ Seaweed)	10	4×/year	45 days	500    800    15    6	300,000    48,000	348,000	25	34,800	2.45	276	0.019
Total	110					3,099,000	145	79,200	5.58	629	0.044

Mangrove ecotourism area = 126 ha. Conversion 1 USD = Rp 14,200

The product of aquaculture in this study area comes from polyculture shrimp+milkfish and milkfish+seaweed. The frequency of shrimp harvesting is two times a year, while milkfish are four times a year with the yield per one-time harvest of 100 kg and 300 kg, respectively. With the price of shrimp (60 thousand/kg) and milkfish (15 thousand/kg), the total benefit value per year of these products was 510 million rupiahs (36 thousand USD). Each farmer's household can obtain 30 million rupiahs (2,110 USD) per year. With the total area of mangrove 126 ha,

the economic value was calculated at 238 thousand rupiahs (17 USD) per year per hectare (Table 1).

Furthermore, the polyculture products (milkfish+seaweed), the number of respondents encountered in the field has amounted to 10 families, the polyculture products (milkfish+seaweed). An average harvesting frequency of milkfish is also done four times a year with the yield per harvest of 500 kg, while for seaweed which has an average harvest frequency of 45 days, the product is 800 kg. Therefore, with the price of 15 thousand per kg (milkfish) and seaweed (6 thousand, in dry conditions), the total benefit values per year from these two products is 348 million rupiahs (25 thousand USD). Each farmer's household can obtain 34.8 million rupiahs (2,450 USD) per year. With the total area of mangrove 126 ha, the economic value was calculated at 276 thousand rupiahs (19 USD) per year per hectare (Table 1).

Based on the cumulative results of the three economic values of the products, the total economic value of mangrove forest from fishery products was 3.1 billion rupiahs (145 thousand USD) per year or 629 thousand rupiahs (44 USD). The highest benefit value for fishery products was derived from polyculture milkfish and seaweed (348 million rupiahs (25 thousand USD) per year or 276 thousand rupiahs (19 USD) per year per hectare) (Table 1).

#### **4.1.2. Economic Valuation of Mangrove Ecotourism Services**

Table 2 shows that tourists visiting the mangrove ecotourism area of Tongke-Tongke during the fieldwork come from district of Bone, Bulukumba and Sinjai and Makassar City. The most significant number of visitors is coming from Sinjai District and the lowest from Makassar City. To access this ecotourism area, the total cost incurred comes from the cost of transportation, consumption, and parking. In this ecotourism area, the fee enter has not been imposed, while the lodging fee is not available due to commonly the visitors do not stay, and if anyone is visiting, they will stay with their family.

Table 2. Origin and Number of Tourists in Mangrove Ecotourism Area

No.	Origin of Tourist	Number of Tourist
1	Sinjai District	75
2	Bone District	13
3	Bulukumba District	9
4	Makassar City	5
	Total	102

Table 3. Total of travel cost of tourists from each district/city to mangrove tourism area

Origin of Tourist	Cost of Transportation (in Rp)	Cost of Consumption (in Rp)	Cost of Parking (in Rp)	Travel Cost (in Rp)
Sinjai District	1,500,000	3,000,000	375,000	4,875,000
Bone District	1,040,000	780,000	65,000	1,885,000
Bulukumba District	450,000	540,000	45,000	1,035,000
Makassar City	500,000	300,000	25000	825,000

Furthermore, the highest travel cost obtains from Sinjai tourists, followed by Bone tourists, while the lowest is from Makassar tourists (Table 3). In addition, the highest number of visits per 1000 population comes from Sinjai District, whereas the lowest is from Makassar City (Table 3). Although Makassar city has the highest population than others, the number of tourists from Makassar who visit this ecotourism area is the lowest (Table 4).

Table 4. Number of visits per 1000 Population

Origin of Tourist	Number of Tourist (person)	Number of the population (person)	Number of Visits per 1000 Population
Sinjai District	75	245,501	0.305
Bone District	13	757,741	0.017
Bulukumba District	9	21,959	0.021
Makassar City	5	1,555,088	0.003

Table 5. Economic value of mangrove ecotourism area of tongke-tongke, sinjai district

Origin of Tourist	Travel Cost	Number of population (person)	Economic value/year/1000 visits (Rp)	Economic value/year/100 visits (USD)	Economic value/year/1000 visits/ha (Rp)	Economic value/year/1000 visits/ha (USD)
Sinjai District	4,875,000	245,501	1,196,817,375	84,283	9,498,551	669
Bone District	1,885,000	757,741	1,428,341,785	100,587	11,336,046	798
Bulukumba District	1,035,000	421,959	436,727,565	30,755	3,466,092	244
Makassar City	825,000	1,555,088	1,282,947,600	90,348	10,182,124	717
Total	8,620,000	2,980,289	4,344,834,325	305,974	34,482,812	2,428

Mangrove ecotourism area = 126 ha. Conversion 1 USD = Rp 14,200

Based on the calculation of economic value referring to the travel cost and the number of visitors per 1000 population (Table 5), we found that the total economic value per year is 4.34 billion rupiah (306 thousand USD) or per hectare of 34.48 million rupiah (2,482 USD). The

most significant contribution is found from the Bone district due to the larger economic value per year per 1000 visits to the ecotourism area compared to the other three districts.

#### **4.1.3. Willingness to Pay (WTP) values of tourists of mangrove tourism area**

The range of WTP values for conservation and preservation of mangrove tourism area from 3000 – 8000 rupiahs per month, resulting in the total WTP values of 6.05 million rupiahs (426 USD) per year or 48 thousand rupiahs (3.38 USD) per year per hectare (Table 6).

Table 6. WTP for conservation and preservation of mangrove ecotourism area

No	WTP value/month in Rp)	Frequency (tourists)	WTP value/year (in Rp)	WTP value/year (in USD)	WTP value/year/ha (in Rp)	WTP value/year/ha (in USD)
1	3,000	24	864,000	60.85	6,857	0.48
2	4,000	17	816,000	57.46	6,476	0.46
3	5,000	31	1,860,000	130.99	14,762	1.04
4	6,000	11	792,000	55.77	6,286	0.44
5	7,000	9	756,000	53.24	6,000	0.42
6	8,000	10	960,000	67.61	7,619	0.54
Total		102	6,048,000	426	48,000	3.38

Mangrove ecotourism area = 126 ha. Conversion 1 USD = Rp 14,200

#### **4.1.4. The total economic value of the mangrove tourism area**

The mangrove tourism area's total economic value (TEV) was 35.16 million rupiahs (2,467 USD) per year per hectare. This value was obtained from the sum of various uses of the mangrove ecosystem, where the highest value was derived from recreational value (Table 7).

Table 7. The total economic value of the mangrove tourism area

Economic value	Benefit value/year/ha (in Rp)	Benefit value/year/ha (in USD)
Market value	629,000	44
Recreational value	34,482,812	2,428
CVM value	48,000	3
Total	35,159,812	2,476

Mangrove ecotourism area = 126 ha. Conversion 1 USD = Rp 14,200

## **5. CONCLUSIONS AND RECOMMENDATION**

This research has presented the economic value of mangrove tourism service in Tongke-Tongke Village, Sinjai District. The total economic value (TEV) of the mangrove tourism area was about 35.16 million rupiahs (2.48 thousand USD) per year per hectare. The highest value derived from recreational value (34.4 million rupiahs = 2.43 thousand USD) per year per hectare, and followed by fishery products (629 thousand rupiahs = 44 USD) per year per hectare, and from CVM value (48 thousand rupiahs = 3 USD) per year per hectare. It is prove that mangrove forest in this area have numerous benefits and values to local communities.

Mangrove area of Tongke-Tongke have the experience of being part of a famous mangrove tourism destination in South Sulawesi province in the recent decades. Many visitors in this mangrove tourism area are willing to pay for conserving and preserving this mangrove area. This is one of the exciting potentials of tourism that can be developed by local stakeholders and managed by the local people. Therefore, more attention from stakeholders and decision makers is needed to facilitate implementation of appropriate actions of conserving and restoring mangrove areas that have been lost from over-exploitation (mangrove cutting and aquaculture development) in this region. It is of high priority to maintain and possibly increase mangrove economic values, tourism, and sustainable use.

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## APPENDIXES

### Appendix 1. Letter of agreement from partners for research collaboration



UNIVERSITY  
of HAWAII<sup>TM</sup>  
MĀNOA

Department of Economics

April 7, 2021

To whom it may concern,

I agree to cooperate and collaborate with Abdul Abdul Malik, S.T., M.Si. Ph.D. in the Department of Geography, Universitas Negeri Makassar (UNM) on the project titled "Economic Valuation of Mangrove Tourism Services for Conservation and Sustainable Management: A Case Study in Sinjai District, South Sulawesi, Indonesia". If you need any additional information, feel free to contact me at 808-956-8280 or by email at [lynham@hawaii.edu](mailto:lynham@hawaii.edu).

Sincerely,

A handwritten signature in black ink, appearing to read "John Lynham".

John Lynham  
Professor, Department of Economics  
Director, Graduate Ocean Policy Certificate Program

2424 Maile Way, Saunders 542, Honolulu, Hawai'i 96822  
Telephone: (808) 956-8496 Fax: (808) 956-4347  
An Equal Opportunity/Affirmative Action Institution



KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN  
UNIVERSITAS HASANUDDIN  
LEMBAGA PENELITIAN DAN PENGABDIAN KEPADA MASYARAKAT (LPPM)  
Jl. Perintis Kemerdekaan KM.10, Makassar 90245  
Telp.(0411) 587032, 582500, 588888 Fax.(0411) 587032, 584024  
Laman : <http://lp2m.unhas.ac.id> email : [lp2m@unhas.ac.id](mailto:lp2m@unhas.ac.id)

### SURAT PERNYATAAN MITRA

Yang bertanda tangan dibawah ini:

Nama : Dr. Ir. Abd. Rasyid Jalil, M.Si.  
Pekerjaan : Dosen  
Institusi : Jurusan Ilmu Kelautan, Fakultas Ilmu Kelautan dan Perikanan,  
Universitas Hasanuddin  
Alamat : Jl. Perintis Kemerdekaan Km. 10, Tamalanrea, Makassar,  
Indonesia

Menyatakan bahwa saya memiliki komitmen, kemampuan dan tanggung jawab untuk bekerjasama dengan Universitas Negeri Makassar dan University of Hawaii untuk penelitian yang berjudul: Economic Valuation of Mangrove Tourism Service for Conservation and Sustainable Management: A Case Study in Sinjai District, South Sulawesi, Indonesia.

Hal-hal yang mengatur peran dan kontribusi serta tanggungjawab dalam kerjasama ini akan dikomunikasikan dengan baik dan dirinci dalam perjanjian terpisah berdasarkan kesepakatan semua pihak.

Demikian surat pernyataan ini dibuat dengan sebenar-benarnya, penuh kesadaran dan tanggungjawab.

Makassar, 26 Maret 2021

A photograph of a handwritten signature in black ink, which appears to be "Dr. Ir. Abd. Rasyid Jalil, M.Si.", placed over a 10,000 Indonesian Rupiah postage stamp. The stamp features the national emblem of Indonesia at the top, followed by the text "10000" and "METERAI TEMPEL". Below the emblem, there is a serial number: "JFC10AJX027882446".

Dr. Ir. Abd. Rasyid Jalil, M.Si.



## Appendix 2. Letter of Research Permit



**KEMENTERIAN PENDIDIKAN, KEBUDAYAAN,  
RISET, DAN TEKNOLOGI**  
**UNIVERSITAS NEGERI MAKASSAR (UNM)**  
**LEMBAGA PENELITIAN DAN PENGABDIAN KEPADA MASYARAKAT**  
Menara Pinisi UNM Lt. 10 Jalan A. Pangarang Pettarani, Makassar  
Telepon: 0411-865677 Fax. 0411-861377  
Laman: [www.unm.ac.id](http://www.unm.ac.id) Email: [lpmm@unm.ac.id](mailto:lpmm@unm.ac.id) & [lemlitunm@yahoo.co.id](mailto:lemlitunm@yahoo.co.id)

Nomor : 3688/UN36.11/LP2M/2021  
Lampiran : Satu berkas  
Perihal : Izin Penelitian

18 Juni 2021

Yth. Kepala Dinas Peranaman Modal dan Pelayanan Terpadu Satu Pintu  
Provinsi Sulawesi Selatan  
di  
Tempat

Dalam rangka Pelaksanaan Program Penelitian PNBP Universitas Negeri Makassar Tahun Anggaran 2021 pada Lembaga Penelitian dan Pengabdian kepada Masyarakat (LP2M UNM), dengan hormat disampaikan bahwa ketua peneliti yang tersebut dibawah ini:

Nama : Abdul Malik, ST., M.Si., Ph.D.  
NIP : 197710112006041001  
Fakultas : FMIPA UNM

Akan melakukan penelitian dengan judul:

*"Economic Valution of Mangrove Tourism Service for Conservation and Sustainable Management : A Case Study in Sinjai District, South Sulawesi, Indonesia"*

Skema Penelitian : Penelitian PNBP KAMPUS MERDEKA UNM T. A. 2021  
Lokasi Penelitian : Kabupaten Sinjai  
Anggota Tim Peneliti : Prof. John Lynham, Ph.D., Dr. Ir. Abd. Rasyid Jalil, M.Si. , Dr. Abd. Rahim, S.P., M.Si. & Dr. Ernawati S. Kaseng, M.Si

Pelaksanaannya direncanakan selama 7 (tujuh) bulan Mei s.d. November 2021

Sehubungan dengan hal tersebut diatas, dimohon kiranya yang bersangkutan dapat diberikan izin penelitian.

Atas perhatian dan kerjasama yang baik diucapkan terima kasih

Ketua,

Prof. Dr. Ir. H. Bakhtiani A. Rauf, M.T.  
NIP. 19611016 198803 1 006

Tembusan  
- Rektor UNM (sebagai laporan)

### Appendix 3. Letter of Research Contract



KEMENTERIAN PENDIDIKAN, KEBUDAYAAN,  
RISET, DAN TEKNOLOGI  
UNIVERSITAS NEGERI MAKASSAR (UNM)  
LEMBAGA PENELITIAN DAN PENGABDIAN KEPADA MASYARAKAT  
Menara Pinisi UNM Lt. 10 Jalan A. Pangerang Pettarani, Makassar  
Telepon: 0411-865677 Fax. 0411-861377  
Laman: www.unm.ac.id Email: lppm@unm.ac.id & lemlitum@yaboo.co.id

**KONTRAK PENELITIAN**  
**PNBP KAMPUS MERDEKA BELAJAR DALAM DAN LUAR NEGERI**  
**TAHUN ANGGARAN 2021**  
**NOMOR : 3531/UN36.11/LP2M/2021**

Pada hari ini Senin tanggal Empat belas bulan Juni tahun Dua ribu dua satut, kami yang bertanda tangan di bawah ini:

- 1 Prof. Dr. Ir. H. Bakhrani A. Rauf, M.T : Ketua Lembaga Penelitian dan Pengabdian kepada Masyarakat (LP2M), Universitas Negeri Makassar, dalam hal ini bertindak untuk dan atas nama Universitas Negeri Makassar, yang berkedudukan di Jl. Andi Pangerang Pettarani Makassar, untuk selanjutnya disebut **PIHAK PERTAMA**;
- 2 Abdul Malik, ST., M.Si., Ph.D. : Dosen FMIPA Universitas Negeri Makassar, dalam hal ini bertindak sebagai pengusul dan Ketua Tim Pelaksana Penelitian PNBP Kampus Merdeka Belajar Dalam dan Luar Negeri Tahun Anggaran 2021 untuk selanjutnya disebut **PIHAK KEDUA**.

**PIHAK PERTAMA** dan **PIHAK KEDUA**, secara bersama-sama sepakat mengikatkan diri dalam suatu Kontrak Penelitian, dengan ketentuan dan syarat sebagai berikut:

**PASAL 1**  
**RUANG LINGKUP KONTRAK**

**PIHAK PERTAMA** memberi pekerjaan kepada **PIHAK KEDUA** dan **PIHAK KEDUA** menerima pekerjaan tersebut dari **PIHAK PERTAMA**, untuk melaksanakan dan menyelesaikan Penelitian PNBP Kampus Merdeka Belajar Dalam dan Luar Negeri Tahun Anggaran 2021 dengan judul:

**"Economic Valuation of Mangrove Tourism Service for Conservation and Sustainable Management : A Case Study in Sinjai District, South Sulawesi, Indonesia".**

**PASAL 2**  
**DANA PENELITIAN**

- (1) Besarnya dana untuk melaksanakan penelitian dengan judul sebagaimana dimaksud pada Pasal 1 adalah sebesar **Rp 100,000,000 (Seratus juta rupiah)** sudah termasuk pajak, sesuai Surat Keputusan Rektor Universitas Negeri Makassar Nomor : 616/UN36/HK/2021 tanggal 21 Mei 2021
- (2) Dana Penelitian sebagaimana dimaksud pada ayat (1) dibebankan pada Daftar Isian Pelaksanaan Anggaran (DIPA) Universitas Negeri Makassar Nomor : SP-DIPA - 023.17.2.677523/2021 Revisi ke 01, tanggal 4 Mei 2021

**PASAL 3**  
**TATA CARA PEMBAYARAN DANA PENELITIAN**

- (1) **PIHAK PERTAMA** memberikan pendanaan penelitian sebesar: **Rp.100,000,000** (*Seratus juta rupiah*) jumlah keseluruhan yang dibebankan kepada DIPA Universitas Negeri Makassar.
- (2) Pendanaan penelitian sebagaimana dimaksud pada ayat (1) dibayarkan oleh **PIHAK PERTAMA** kepada **PIHAK KEDUA** secara bertahap:
- Pembayaran Tahap Pertama sebesar **70%** dari total dana penelitian yaitu **70% X Rp.100,000,000 = Rp.70,000,000** (*Tujuh puluh juta rupiah*) yang akan dibayarkan oleh **PIHAK PERTAMA** kepada **PIHAK KEDUA** setelah **PIHAK KEDUA** telah melengkapi proposal penelitian yang memuat judul penelitian, pendekatan dan metode penelitian yang digunakan, data yang akan diperoleh, anggaran yang akan digunakan, dan tujuan penelitian berupa luaran yang akan dicapai dan setelah Kontrak Penelitian ini ditandatangani oleh kedua belah pihak.
  - Pembayaran Tahap Kedua sebesar **30%** dari total dana penelitian yaitu **30% X Rp.100,000,000 = Rp.30,000,000** (*Tiga puluh juta rupiah*) setelah menyerahkan Laporan Lengkap Penelitian dan Luaran Wajib Penelitian ke Lembaga Penelitian dan Pengabdian kepada Masyarakat (LP2M) Universitas Negeri Makassar.
- (3) Pendanaan Kontrak Penelitian sebagaimana dimaksud pada ayat (1) akan disalurkan oleh **PIHAK PERTAMA** kepada **PIHAK KEDUA** ke rekening sebagai berikut:

Nama pada rekening	:	ABDUL MALIK
Nomor Rekening	:	809480646
Nama Bank	:	Bank BNI

- (4) **PIHAK PERTAMA** tidak bertanggung jawab atas keterlambatan dan/atau tidak terbayarnya sejumlah dana yang disebabkan karena kesalahan **PIHAK KEDUA** dalam menyampaikan data peneliti, nama bank, nomor rekening, dan persyaratan lainnya yang tidak sesuai dengan ketentuan.

**PASAL 4**  
**JANGKA WAKTU**

- (1) Kontrak Penelitian ini dilaksanakan dalam jangka waktu 1 (satu) tahun
- (2) Kontrak Penelitian sebagaimana dimaksud pada ayat (1) dilaksanakan untuk Jangka waktu pelaksanaan penelitian sampai selesai 100%, adalah paling lambat tanggal **30 November 2021**

**PASAL 5**  
**TARGET LUARAN**

- (1) **PIHAK KEDUA** berkewajiban untuk mencapai target luaran wajib penelitian sebagaimana yang dijanjikan dalam proposal penelitian
- (2) **PIHAK KEDUA** berkewajiban untuk melaporkan perkembangan pencapaian target luaran sebagaimana dimaksud pada ayat (1) kepada **PIHAK PERTAMA**

**PASAL 6**  
**HAK DAN KEWAJIBAN PARA PIHAK**

- (1) Hak dan Kewajiban **PIHAK PERTAMA**:
- PIHAK PERTAMA** berkewajiban untuk memberikan dana penelitian kepada **PIHAK KEDUA** dengan jumlah sebagaimana dimaksud dalam Pasal 2 ayat (1) dan dengan tata cara pembayaran sebagaimana dimaksud dalam Pasal 3;
  - PIHAK PERTAMA** berhak untuk mendapatkan dari **PIHAK KEDUA** luaran penelitian sebagaimana dimaksud dalam Pasal 5;
  - PIHAK PERTAMA** berhak untuk mendapatkan dari **PIHAK KEDUA** Hardcopy dan Softcopy Laporan Akhir, Surat Pernyataan Tanggungjawab Belanja (SPTB) dan luaran penelitian.

(2) Hak dan Kewajiban **PIHAK KEDUA**:

- a. **PIHAK KEDUA** berhak menerima dana penelitian dari **PIHAK PERTAMA** dengan jumlah sebagaimana dimaksud dalam Pasal 2 ayat (1);
- b. **PIHAK KEDUA** berkewajiban untuk bertanggungjawab dalam penggunaan dana penelitian yang diterimanya sesuai dengan proposal kegiatan yang telah disetujui;
- c. **PIHAK KEDUA** berkewajiban mengikuti seminar hasil penelitian baik Nasional maupun Internasional;
- d. **PIHAK KEDUA** berkewajiban menyerahkan *Hardcopy* Laporan Akhir Penelitian, Surat Pernyataan Tanggungjawab Belanja (SPTB), Luaran Penelitian kepada **PIHAK PERTAMA**, paling lambat 30 November 2021 sebanyak 2(dua) eksemplar ke LP2M UNM.
- e. **PIHAK KEDUA** berkewajiban mengunggah *softcopy* Laporan Akhir Penelitian, Surat Pernyataan Tanggungjawab Belanja (SPTB), Luaran Penelitian yang telah dilaksanakan ke laman <https://simlp2m.unm.ac.id>, paling lambat 30 November 2021.

**PASAL 7  
LAPORAN PELAKSANAAN PENELITIAN**

- (1) **PIHAK KEDUA** berkewajiban untuk menyampaikan kepada **PIHAK PERTAMA** berupa laporan akhir, luaran penelitian dan Surat Pernyataan Tanggungjawab Belanja (SPTB) sesuai dengan jumlah dana yang diberikan oleh **PIHAK PERTAMA** yang tersusun secara sistematis sesuai pedoman yang ditentukan oleh **PIHAK PERTAMA**.
- (2) Laporan Akhir/hasil Penelitian sebagaimana dimaksud dalam Pasal 6 ayat (2.d) harus memenuhi ketentuan sebagai berikut:
- a. Bentuk/ukuran kertas A4 ditulis dalam format font Times New Romans Ukuran 12 Spasi 1,5, Warna sampul muka Coklat Tua dan Cetak Punggung
  - b. Di bawah bagian cover ditulis:

Dibiayai oleh:

DIPA Universitas Negeri Makassar

Nomor: SP DIPA - 023.17.2.677523/2021 Revisi ke 01, tanggal 4 Mei 2021

Sesuai Surat Keputusan Rektor Universitas Negeri Makassar

Nomor: 616/UN36/HK/2021 tanggal 21 Mei 2021

**PASAL 8  
MONITORING DAN EVALUASI**

**PIHAK PERTAMA** dalam rangka pengawasan akan melakukan Monitoring dan Evaluasi Internal pada bulan Oktober 2021 terhadap kemajuan pelaksanaan Penelitian Tahun Anggaran 2021.

**PASAL 9  
PENILAIAN LUARAN**

Penilaian luaran penelitian dilakukan oleh Komite Penilai/*Reviewer* Luaran sesuai dengan ketentuan yang berlaku.

**PASAL 10  
PERUBAHAN SUSUNAN TIM PELAKSANA DAN SUBSTANSI PELAKSANAAN**

Perubahan terhadap susunan tim pelaksana dan substansi pelaksanaan Penelitian ini dapat dibenarkan apabila telah mendapat persetujuan tertulis dari Ketua Lembaga Penelitian dan Pengabdian Kepada Masyarakat (LP2M) Universitas Negeri Makassar.

**PASAL 11  
PENGGANTIAN KETUA PELAKSANA**

- (1) Apabila **PIHAK KEDUA** selaku ketua pelaksana tidak dapat melaksanakan Penelitian ini, maka **PIHAK KEDUA** wajib mengusulkan pengganti ketua pelaksana yang merupakan salah satu anggota tim kepada **PIHAK PERTAMA**.
- (2) Apabila **PIHAK KEDUA** tidak dapat melaksanakan tugas dan tidak ada pengganti ketua sebagaimana dimaksud pada ayat (1), maka **PIHAK KEDUA** harus mengembalikan dana penelitian kepada **PIHAK PERTAMA** yang selanjutnya disetor ke Kas Negara.
- (3) Bukti setor sebagaimana dimaksud pada ayat (2) disimpan oleh **PIHAK PERTAMA**

## PASAL 12 PEMBATALAN PERJANJIAN

- (1) Apabila dikemudian hari terhadap judul Penelitian sebagaimana dimaksud dalam Pasal 2 ditemukan adanya duplikasi dengan Penelitian lain dan/atau ditemukan adanya ketidakjujuran, itikad tidak baik, dan/atau perbuatan yang tidak sesuai dengan kaidah ilmiah dari atau dilakukan oleh **PIHAK KEDUA**, maka perjanjian Penelitian ini dinyatakan batal dan **PIHAK KEDUA** wajib mengembalikan dana penelitian yang telah diterima kepada **PIHAK PERTAMA** yang selanjutnya akan disetor ke Kas Negara.
- (2) Bukti setor sebagaimana dimaksud pada ayat (1) disimpan oleh **PIHAK PERTAMA**.

## PASAL 13 PAJAK-PAJAK

Hal-hal dan/atau segala sesuatu yang berkenaan dengan kewajiban pajak berupa

- a. Pembelian barang dan jasa dikenai PPN sebesar 10% dan PPh 22 sebesar 1,5%
- b. Belanja honorarium PPh Pasal 21 sebesar: 5% bagi yang memiliki NPWP untuk golongan III, untuk golongan IV sebesar 15% dan 6% bagi yang tidak memiliki NPWP
- c. Pajak-pajak lain sesuai ketentuan

menjadi tanggungjawab **PIHAK KEDUA** dan harus dibayarkan oleh **PIHAK KEDUA** kekantor pelayanan pajak setempat sesuai ketentuan yang berlaku.

## PASAL 14 KEKAYAAN INTELEKTUAL

- (1) Hak kekayaan Intelektual yang dihasilkan dari pelaksanaan penelitian diatur dan dikelola sesuai dengan peraturan dan perundang-undangan
- (2) Setiap publikasi, makalah, dan/atau ekspos dalam bentuk apapun yang berkaitan dengan hasil penelitian ini wajib mencantumkan Universitas Negeri Makassar
- (3) Hasil penelitian berupa peralatan adalah milik Negara dan dapat dihibahkan kepada institusi/lembaga melalui Berita Acara Serah Terima (BAST)

## PASAL 15 PERALATAN DAN/ALAT HASIL PENELITIAN

Hasil Pelaksanaan Penelitian ini yang berupa peralatan dan/atau alat yang dibeli dari pelaksanaan Penelitian ini adalah milik Negara yang dapat dihibahkan kepada Universitas Negeri Makassar sesuai dengan ketentuan peraturan perundang-undangan

## PASAL 16 INTEGRITAS AKADEMIK

- (1) Pelaksana penelitian wajib menjunjung tinggi integritas akademik yaitu komitmen dalam bentuk perbuatan yang berdasarkan pada nilai kejujuran, kredibilitas, kewajaran, kehormatan, dan tanggung jawab dalam kegiatan penelitian yang dilaksanakan.
- (2) Penelitian dilakukan sesuai dengan kerangka etika, hukum dan profesionalitas, serta kewajiban sesuai dengan peraturan yang berlaku.
- (3) Penelitian dilakukan dengan menjunjung tinggi standar ketelitian dan integritas tertinggi dalam semua aspek penelitian

## PASAL 17 KEADAAN KAHAR

- (1) **PARA PIHAK** dibebaskan dari tanggung jawab atas keterlambatan atau kegagalan dalam memenuhi kewajiban yang dimaksud dalam Kontrak Penelitian disebabkan atau diajibatkan oleh peristiwa atau kejadian diluar kuasaan **PARA PIHAK** yang dapat digolongkan sebagai keadaan memaksa (*force majeure*).
- (2) Peristiwa atau kejadian yang dapat digolongkan keadaan memaksa (*force majeure*) dalam Kontrak Penelitian ini adalah bencana alam, wabah penyakit, kebakaran, perang, blockade, peledakan, sabotase, revolusi, pemberontakan, huru-hara, serta adanya tindakan pemerintah dalam bidang ekonomi dan moneter yang secara nyata berpengaruh terhadap pelaksanaan Kontrak Penelitian ini.

- (3) Apabila terjadi keadaan memaksa (*force majeure*) maka pihak yang mengalami wajib memberitahukan kepada pihak lainnya secara tertulis, selambat-lambatnya dalam waktu 7 (tujuh) hari kerja sejak terjadinya keadaan memaksa (*force majeure*), disertai dengan bukti-bukti yang sah dari pihak yang berwajib, dan **PARA PIHAK** dengan itikad baik akan segera membicarakan penyelesaiannya.

**PASAL 18  
PENYELESAIAN PERSELISIHAN**

- (1) Apabila terjadi perselisihan antara **PIHAK PERTAMA** dan **PIHAK KEDUA** dalam pelaksanaan Kontrak Penelitian ini akan dilakukan penyelesaian secara musyawarah dan mufakat,
- (2) Dalam hal tidak tercapai penyelesaian secara musyawarah dan mufakat sebagaimana dimaksud pada ayat (1) maka penyelesaian dilakukan melalui proses hukum yang berlaku dengan memilih domisili hukum di Pengadilan Negeri.

**PASAL 19  
AMANDEMEN KONTRAK**

Apabila terdapat hal lain yang belum diatur atau terjadi perubahan dalam Kontrak Penelitian ini, maka akan dilakukan Amandemen Kontrak Penelitian

**PASAL 20  
SANKSI**

- (1) Apabila sampai dengan batas waktu yang telah ditetapkan untuk melaksanakan Kontrak Penelitian telah berakhir, **PIHAK KEDUA** tidak melaksanakan kewajiban sebagaimana dimaksud dalam Pasal 6 ayat (2), maka **PIHAK KEDUA** dikenai sanksi administratif;
- (2) Sanksi administratif sebagaimana dimaksud pada ayat (1) dapat berupa penghentian pembayaran dan Ketua Tim Pelaksana Penelitian tidak dapat mengajukan proposal penelitian dalam kurun waktu dua tahun berturut-turut.

**PASAL 21  
LAIN-LAIN**

- (1) **PIHAK KEDUA** menjamin bahwa penelitian dengan judul tersebut di atas belum pernah dibiayai dan/atau dilukutsertakan pada Pendanaan Penelitian lainnya, baik yang diselenggarakan oleh instansi, lembaga, perusahaan atau yayasan, baik di dalam maupun di luar negeri.
- (2) Segala sesuatu yang belum cukup diatur dalam Perjanjian ini dan dipandang perlu diatur lebih lanjut dan dilakukan perubahan oleh **PARA PIHAK**, maka perubahan-perubahannya akan diatur dalam perjanjian tambahan atau perubahan yang merupakan satu kesatuan dan bagian yang tidak terpisahkan dari Perjanjian ini.

**PASAL 22  
PENUTUP**

Kontrak Penelitian ini berlaku sejak tanggal ditandatangani, dibuat dalam rangkap 3 (tiga), memiliki kekuatan hukum yang sama, bermaterai cukup, dan biaya materai dibebankan kepada **PIHAK KEDUA**



**PIHAK KEDUA**

Abdul Malik, ST., M.Si., Ph.D.  
NIP: 197710112006041001

## Appendix 4. Research Instrument

### KUESIONER PENELITIAN VALUASI EKONOMI JASA WISATA MANGROVE

NO. KUESIONER :

DESA : Tongke-Tongke

KECAMATAN : Sinjai TImur

KABUPATEN : Sinjai

Propinsi : Sulawesi Selatan

HARI/TANGGAL :

No.	DAFTAR PERTANYAAN	JAWABAN
<b>I. IDENTITAS RESPONDEN</b>		
1	Nama	
2	Umur	
3	Jenis Kelamin	Laki (L) /perempuan (P)
4	Status Perkawinan	1. Kawin ; 2. Belum kawin ; 3. Duda/janda
5	Tingkat Pendidikan	1. Tidak pernah sekolah; 2. tamat SD; 3. tamat SMP; 4. tamat SMA; 5. tamat Perguruan tinggi
6	Kedudukan responden dalam rumah tangga	Kepala keluarga; 2. Istri/pasangan ; 3. Anak laki-laki/perempuan; 5. Lainnya, Sebutkan:
7	Jumlah anggota rumah tangga	orang
<b>II. AKTIFITAS/MATA PENCAHARIAN DAN EKONOMI RUMAH TANGGA RESPONDEN</b>		
1	Mata pencaharian utama	1. Nelayan; 2. Petani sawah/kebun; 3. Petani tambak; 4. Pemungut kayu hutan; 5. Pegawai Negeri Sipil/PNS; 6. Pedagang/pengusaha; 7. lainnya, sebutkan:
2	Kegiatan lain selain mata pencaharian tersebut	Sebutkan:
3	Yang manakah dari sumber mata pencaharian yang paling penting (terkait jumlah pendapatan yang dihasilkan)?	Pertama :  Kedua :
4	Siapa-siapa yang terlibat dalam aktifitas mata pencaharian Anda	1. Kepala keluarga; 2. Istri/pasangan; 3. Anak laki-laki/perempuan; 4. Lainnya, Sebutkan:

5	Jika mendapatkan hasil/pendapatan, berapa besar total jumlahnya per bulan yang diperoleh rumah tangga?  Tolong jabarkan dari tiap-tiap anggota keluarga:	Kepala keluarga: Rp Istri/pasangan Rp Anak laki-laki/perempuan: Rp Lainnya, Sebutkan: Rp.  Total = Rp
---	----------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------

### III. PEMANFAATAN HUTAN MANGROVE

1	Apakah Anda memanfaatkan hutan mangrove di sekitar tempat tinggal Anda?	. Ya, Jika Ya, jawab no. 2 – 3 . Tidak pernah
2	Sudah berapa lama Anda memanfaatkan hutan mangrove?	tahun (year)
3	Jenis pemanfaatan hutan mangrove yang Anda lakukan?  (Jawaban dapat lebih dari satu).	1. Untuk kayu bakar (Jawab IV. A) 2. Membuat arang (Jawab IV. A) 3. Bahan kerajinan dari daun Nipa (Jawab IV. A) 4. Membuat makanan/minuman dari buah mangrove (Jawab IV. A) 5. Material rumah ((Jawab IV. A)) 6. Menangkap ikan, udang, kepiting dan kerang (Jawab IV. A) 7. Menangkap benur (Jawab IV. A) 8. Menangkap nener (Jawab IV. A) 9. Dikonversi menjadi tambak (Jawab IV.B) 10. Lainnya, sebutkan

### IV.A. Kayu bakar, arang, daun nipah, material rumah, buah mangrove, perikanan: ikan, udang, kepiting, kerang, benur dan nener

1	Seberapa sering Anda memanfaatkan hutan mangrove dan untuk apa ?	1 = setiap hari untuk 2 = 1 x seminggu untuk 3 = 2 x seminggu untuk 4 = 3 x seminggu untuk 5 = Lain-lain, sebutkan:
2	Jumlah yang diperoleh per 1x pemanfaatan?	- Kayu bakar = ikat; - Arang = karung/sak - Daun nipah = lembar ; - Buah mangrove= keranjang - Material rumah = ikat; - Ikan = kg - Udang = kg; - Kepiting = kg - Kerang = kg; - Benur = ekor - Nener = ekor 1 ikat kayu = batang; 1 sak = kg  1 keranjang buah = buah.
3	Produk yang diperoleh akan digunakan untuk?	. Di jual. Jika dijual jawab no. 4-6 . Di konsumsi sendiri
4	Jika di jual, berapa harga jualnya per ikat/lembar/kerangjang/kg/ekor ?	Kayu bakar = Rp /ikat Arang = Rp /karung/sak Daun nipah = Rp /lembar Buah mangrove= Rp /keranjang Material rumah = Rp /ikat Ikan = Rp /kg Udang = Rp /kg

		Kepiting = Rp /kg Kerang = Rp /kg Benur = Rp /ekor Nener = Rp /ekor
5	Jika dijual, kemana Anda menjual hasil hutan mangrove?	Kayu bakar: Daun nipah : Material rumah: Udang: Kerang : Nener: - Arang: - Buah mangrove: - Ikan : - Kepiting: - Benur:
6	Berapa biaya operasional yang Anda keluarkan untuk melakukan setiap kegiatan pemanfaatan hutan mangrove?	Kayu bakar = Rp -Arang = Rp Daun nipah = Rp - Buah mangrove= Rp Material rumah = Rp - Ikan = Rp Udang = Rp - Kepiting = Rp Kerang = Rp - Benur = Rp Nener = Rp
<b>IV.B. Dikonversi menjadi tambak</b>		
1	Alasan utama apa yang mendorong untuk memilih usaha ini?	1 = Pendapatan yang diperoleh tinggi 2 = Peluang kerja lebih besar 3 = Keterkaitan/usaha keluarga 4 = Lainnya, sebutkan:
2	Bagaimana dampak positif terhadap pendapatan/kesejahteraan rumah tangga dari kegiatan konversi mangrove ke tambak?	1 = Besar; 2 = Sedang; 3 = Sedikit ; 4 = Tidak sama sekali
3	Apakah Anda berharap profit dalam jangka panjang dari kegiatan budidaya tambak?	1 = Banyak berharap ; 2 = Sedang ; 3 = Sedikit berharap 4 = Tidak sama sekali
4	Komoditi yang dibudidayakan di tambak ?	Udang ; 2 . Ikan ; 3. Rumput laut ; 4. Lainnya, sebutkan:
5	Berapa luasan lahan tambak yang dimiliki?	..... Ha
6	Bagaimana status kepemilikan lahannya ?	1. Milik sendiri; 2. Sewa / kontrak; Lainnya, sebutkan:
7	Berapa kali panen pertahun?	kali/tahun
8	Berapa jumlah produksi per panen yang dihasilkan?	kg/panen
9	Berapa harga per kg?	Rp /kg
10	Biaya produksi per 1x panen per hektar? (termasuk mis: harga bibit, pakan, pupuk, obat-obatan, media budidaya, dan upah tenaga kerja)	Rp. /Panen/Ha
11	Penghasilan bersih rata-rata dalam satu kali panen selama lima tahun terakhir?	Rp.

## Kuesioner Wisatawan

### Biaya Perjalanan Kawasan Wisata Mangrove Tongke-Tongke Kabupaten Sinjai

NO. KUESIONER :  
NAMA KAWASAN WISATA : Tongke-Tongke  
MANGROVE  
DESA : Tongke-Tongke  
KECAMATAN : Sinjai Timur  
KABUPATEN : Sinjai  
Propinsi : Sulawesi Selatan  
HARI/TANGGAL :

#### I. Identitas Responden

1. Nama responden : .....
2. Jenis Kelamin : .....
3. Usia : .....
4. Domisili (Kab./Kota) : .....
5. Pekerjaan Utama
  - a. Pelajar/Mahasiswa
  - b. PNS
  - c. TNI/Polri
  - d. Pegawai Swasta
  - e. Lain-lain (.....)
6. Jumlah pendapatan atau kiriman (Untuk pelajar/mahasiswa) rata-rata perbulan
  - a. Kurang dari Rp 1000.000
  - b. Rp 1000.000 – 1.500.000
  - c. Rp 1.500.000 – Rp 2.000.000
  - d. Rp 2.000.000 – Rp 2.500.000
  - e. Rp 2.500.000 – Rp 3.000.000
  - f. Lebih dari Rp 3.000.000
7. Jarak tempat tinggal ke kawasan ekowisata ini
  - a. Kurang dari 5 KM
  - b. 6 - 10 KM
  - c. 11 - 20 KM
  - d. 21 - 25 KM
  - e. Lebih dari 25 KM

#### II. Biaya Perjalanan

1. Kendaraan yang anda gunakan untuk menuju kawasan hutan ekowisata mangrove ini:
  - a. Kendaraan pribadi (.....) \*diisi mobil/motor
  - b. Kendaraan Umum (.....) \*diisi angkot/taksi/ojek
  - c. Kendaraan milik instansi
2. Berapa biaya yang anda keluarkan untuk menuju kawasan hutan ekowisata mangrove ini:
  - a. Transportasi : Rp.....
  - b. Konsumsi : Rp.....
  - c. Tiket masuk: Rp .....

- d. Souvenir : Rp.....
  - e. Usaha Jasa (sewa gazebo, pelampung, pancing, dll) : Rp.....
  - f. Lain-lain (parkir/toilet) : Rp.....
- Total : Rp.....

### III. Penilaian terhadap Kawasan Ekowisata

1. Apa yang anda ketahui mengenai soal ekowisata ?  
.....
2. Bagaimana akses jalan menuju kawasan hutan ekowisata mangrove ini ?
  - a. Sangat Baik ; b. Baik; c. Biasa saja; d. Kurang Baik;
  - e. Sangat kurang baik
3. Sudah berapa kali anda berkunjung ke tempat ini?
  - a. 1 kali      b. 2 kali      c. 3 kali      d. 4 kali      e. > 4 kali
4. Menurut anda, bagaimana keindahan alam kawasan ekowisata hutan mangrove ini ?
  - a. Sangat indah
  - b. Indah
  - c. Biasa saja
  - d. Jelek
  - e. Sangat Jelek
5. Menurut anda, apakah kawasan ekowisata hutan mangrove ini perlu adanya penambahan fasilitas/?
  - a. Sangat perlu      b. Perlu      c. Tidak perlu

Jika perlu, fasilitas apa yang perlu ditambah? .....
6. Anda memperoleh informasi tentang kawasan hutan ekowisata ini dari :
  - a. Media Internet
  - b. Media Cetak (brosur dll)
  - c. Media elektronik (TV/Radio)
  - d. Teman/Keluarga
  - e. Lainnya (.....)
7. Kedatangan anda ke kawasan hutan ekowisata mangrove ini merupakan
  - a. Tujuan utama      b. Persinggahan/transit
8. Apakah ada tempat wisata lain yang anda kunjungi?
  - a. Ada, yaitu .....
  - b. Tidak ada
9. Apa harapan dan keinginan anda untuk kemajuan tempat ini?  
.....
10. Jikalau anda diminta untuk berpartisipasi dalam upaya perlindungan dan pelestarian kawasan hutan ekowisata mangrove ini, Apakah Anda bersedia? Jika Ya, berapakah kesediaan Anda membayar untuk hal ini? Rp.....

## Appendix 5. Fieldwork Pictures



Picture 1. Gateway of mangrove tourism area of Tongke-Tongke, Sinjai District



Picture 2. Site plan of mangrove tourism area of Tongke-Tongke, Sinjai District



Picture 2. Mangrove tracking in mangrove tourism area of Tongke-Tongke, Sinjai District



Picture 4. Interview with visitor in mangrove tourism area of Tongke-Tongke, Sinjai District

## Appendix 6. Research Data: WTP Respondent profiles

No. Respondent	Origin of tourist	Sex	Age (year)	Education	Income (Rp)	WTP (Rp)
1	Sinjai	male	32	SMA	4,500,000	6000
2	Sinjai	male	30	SMA	3,500,000	7000
3	Sinjai	male	35	SMA	2,500,000	4000
4	Sinjai	female	27	SMA	3,500,000	6000
5	Bone	female	23	SMP	2,500,000	4000
6	Sinjai	male	20	SMP	3,000,000	8000
7	Sinjai	male	18	SMA	2,500,000	3000
8	Bone	male	23	SMA	2,500,000	6000
9	Sinjai	male	17	SMP	4,500,000	6000
10	Bone	female	38	SMA	4,000,000	7000
11	Sinjai	female	20	SMP	4,000,000	4000
12	Bone	female	47	SMA	3,500,000	3000
13	Bulukumba	male	25	SD	3,500,000	4000
14	Sinjai	male	40	SD	3,000,000	7000
15	Bone	male	36	SD	3,000,000	4000
16	Sinjai	male	38	SMP	2,500,000	7000
17	Sinjai	female	21	SD	2,500,000	3000
18	Bone	female	37	SD	3,500,000	6000
19	Sinjai	female	34	SMP	2,500,000	5000
20	Sinjai	male	27	SD	2,000,000	7000
21	Sinjai	male	30	SD	3,000,000	5000
22	Sinjai	female	24	SMA	2,500,000	5000
23	Bone	female	21	SMP	4,500,000	8000
24	Sinjai	female	19	SMP	3,000,000	3000
25	Bulukumba	female	24	SMA	2,000,000	7000
26	Sinjai	male	25	PT	2,000,000	5000
27	Bulukumba	male	29	SMP	4,000,000	3000
28	Sinjai	male	31	SMA	2,500,000	4000
29	Bone	male	25	SMP	3,000,000	6000
30	Sinjai	male	25	SMP	3,000,000	5000
31	Bulukumba	male	32	SD	3,000,000	6000
32	Sinjai	female	41	SD	2,500,000	7000
33	Sinjai	female	23	SD	2,500,000	5000
34	Sinjai	female	48	SMP	3,000,000	3000
35	Sinjai	female	40	SMP	3,500,000	4000
36	Bone	male	40	SMA	4,500,000	5000

37	Sinjai	male	47	SMA	3,000,000	7000
38	Sinjai	male	27	SMP	2,500,000	5000
39	Sinjai	male	29	SMA	2,500,000	3000
40	Sinjai	female	19	SMA	2,000,000	3000
41	Sinjai	female	24	SMP	3,000,000	8000
42	Sinjai	female	33	SMP	2,500,000	5000
43	Sinjai	male	35	SMP	2,000,000	5000
44	Sinjai	female	25	SMA	2,000,000	4000
45	Sinjai	female	30	SMP	2,500,000	4000
46	Bone	male	27	SMA	3,500,000	3000
47	Bone	male	40	SMA	3,500,000	3000
48	Sinjai	male	48	SMA	3,000,000	8000
49	Sinjai	male	42	SMP	2,500,000	5000
50	Sinjai	male	32	SMP	2,500,000	6000
51	Sinjai	female	26	SMP	3,000,000	8000
52	Sinjai	female	30	SMA	3,000,000	4000
53	Sinjai	male	29	SMP	2,500,000	5000
54	Bone	male	47	SMP	2,500,000	3000
55	Sinjai	male	47	SMA	2,500,000	5000
56	Sinjai	female	33	SMA	3,000,000	7000
57	Sinjai	male	29	SMA	3,000,000	3000
58	Sinjai	female	35	SMA	2,500,000	5000
59	Bone	female	31	PT	3,000,000	4000
60	Sinjai	female	41	SMA	3,500,000	5000
61	Sinjai	female	27	SMA	3,000,000	4000
62	Sinjai	female	40	SMP	3,000,000	5000
63	Makassar	female	37	PT	4,500,000	8000
64	Makassar	male	34	PT	5,000,000	3000
65	Sinjai	female	38	SMP	3,000,000	5000
66	Sinjai	female	38	SMA	2,500,000	3000
67	Sinjai	male	37	SMA	3,000,000	4000
68	Sinjai	male	40	SMA	2,500,000	3000
69	Sinjai	male	26	SMP	2,500,000	4000
70	Sinjai	female	47	SMP	3,000,000	8000
71	Makassar	female	43	PT	2,500,000	5000
72	Sinjai	female	42	SMA	3,000,000	5000
73	Sinjai	female	38	SMA	2,500,000	6000
74	Sinjai	male	42	SMA	2,500,000	5000
75	Sinjai	male	28	SMA	2,000,000	3000
76	Sinjai	male	36	SMA	2,500,000	4000

77	Sinjai	male	40	SMP	3,000,000	8000
78	Sinjai	male	27	SMP	2,500,000	5000
79	Sinjai	female	35	SMA	3,000,000	6000
80	Sinjai	female	31	SMA	3,000,000	5000
81	Sinjai	male	42	SMA	2,500,000	3000
82	Sinjai	male	24	SMA	3,000,000	5000
83	Sinjai	male	32	SMA	3,000,000	4000
84	Sinjai	female	30	SMA	3,000,000	5000
85	Sinjai	female	36	SMP	3,000,000	3000
86	Bulukumba	male	40	SMA	2,000,000	5000
87	Sinjai	female	38	SMP	2,500,000	3000
88	Makassar	male	42	SMA	2,000,000	6000
89	Sinjai	male	41	SMA	3,000,000	5000
90	Sinjai	male	33	SMA	2,500,000	3000
91	Sinjai	female	34	SMP	2,500,000	5000
92	Sinjai	male	30	SMP	2,500,000	5000
93	Bulukumba	female	34	SMA	3,000,000	4000
94	Sinjai	male	27	SMA	3,000,000	3000
95	Sinjai	male	35	SMP	2,000,000	3000
96	Sinjai	male	34	SMA	2,500,000	8000
97	Bulukumba	female	32	SMA	3,000,000	5000
98	Sinjai	male	22	SMA	2,500,000	3000
99	Bulukumba	male	33	PT	3,500,000	5000
100	Sinjai	female	21	SMA	2,000,000	3000
101	Makassar	male	27	SMA	5,000,000	8000
102	Bulukumba	female	18	SMA	3,500,000	5000

## Appendix 7. Curriculum vitae of researchers

### Principal Researcher:

#### A. Personal information

1	Full name	Abdul Malik, S.T., M.Si., Ph.D.
2	Academic ranks	Lektor
3	Civil servent ranks	Penata Tingkat I/ IIId
4	NIP	19771011 200604 1 001
5	NIDN	0011107705
6	Place & Date of birth	Ujung Pandang, 11 Oktober 1977
7	Home address	Perumahan Harmoni No. 24, Jl. Karaeng Loe, Sero, Tombolo, Gowa, Sulawesi Selatan
8	Mobile Phone	085398592785 / 087803439691 (Whatsapp)
9	Office address	Jl. Malengkeri Raya, Kampus Parangtambung Makassar
10	Phone/Fax.	0411-4093163
11	E-mail	abdulmalik@unm.ac.id
12	Supervision	Bachelor (S1) = >35 students ; Master (S2) = 8students; PhD (S3) = 0 orang
13	Teaching subjects	Pengembangan Wilayah Pesisir dan Kelautan, Metode Penelitian, Penginderaan Jauh Dasar, Penginderaan Jauh Terapan, Oseanografi, Kartografi Dasar, Kartografi Praktikum, Sistem Informasi Geografis, dan Geomorfologi Sungai & Pantai.
14	Scopus Author ID Google Scholar ID ID-ORCID Sinta ID	56909358300 _gGNoVkAAAAJ 0000-0001-8704-1021 5999101

#### B. Education

	Undergraduate (S1)	Master (S2)	PhD (S3)
University	University of Hasanuddin	University of Hasanuddin	University of Copenhagen, Denmark
Field of science	Marine Science	Management of the coastal and marine environment	Geography
Entry-graduated year	1995 – 2001	2002 – 2005	2012 – 2016
Title of undergraduate, master and PhD thesis	Analisis Harmonik Pasang Surut di Perairan Teluk Sololo	Strategi Pengembangan Wisata Bahari	Change Detection and Sustainable Policy of Mangrove Forests

	Halmahera Tengah Maluku Utara	Kawasan Kepulauan Sembilan	
Name of supervisor	Ir. Abd. Rasyid Jalil, M.Si. Drs. Muhammad Anshar Amran, M.Si.	Prof. Dr. Dadang Ahmad S, M.Eng. Dr. Jamaluddin Jompa, M.Sc.	Prof. Rasmus Fensholt, Ph.D. Prof. Ole Mertz, Ph.D.

### C. Research experiences in past 5 years

No.	Year	Title	Funder
1	2021 <i>(on-going)</i>	Desain Skema Pembayaran Jasa Lingkungan Hutan Mangrove Di Kabupaten Barru Sulawesi Selatan (Principal researcher)	RISTEK DIKTI
2	2021 <i>(on-going)</i>	Strategi Pengelolaan Hutan Mangrove Berkelanjutan Untuk Mitigasi dan Adaptasi Terhadap Perubahan Iklim Di Kabupaten Takalar Sulawesi Selatan (Principal researcher)	RISTEK DIKTI
3	2020	Updating Spasial GIS Kota Makassar (Coordinator of expert team)	BAPPEDA Kota Makassar
4	2020	Persepsi dan Partisipasi Masyarakat dalam Perlindungan Hutan Mangrove Terkait Layanan Penyerapan Karbon di Kabupaten Barru Sulawesi Selatan (Principal researcher)	RISTEK DIKTI
5	2020	Prediksi Suhu Udara Kota Makassar Dengan Metode Autoregresif Integretif Moving Average (Arima) (Researcher member)	RISTEK DIKTI
6	2020	Kajian Kesesuaian Lahan Tanaman Pertanian dan Kehutanan di DAS Lengkese Sub DAS Hulu Jeneberang, Kecamatan Parigi Kabupaten Gowa Sulawesi Selatan (Researcher member)	PNBP FMIPA UNM
7	2019 – 2020	Potential assessment for payment for environmental services: A case study in the mangrove area of West Sulawesi (Principal researcher)	Marine Fellowship Program, Conservation Strategy Fund (CSF) Indonesia
8	2019	Assessing of mangrove cover change and the vulnerability of coastal community livelihoods for adaptation strategies to climate change impact in South Sulawesi (Principal researcher)	Southeast Asian Regional Centre for Tropical Biology (SEAMEO BIOTROP)
9	2019	Strategi dan Desain Pengembangan Kawasan Ekowisata Mangrove di Kelurahan Bebunga Kecamatan Kalukku Kabupaten Mamuju (Year 2- Principal researcher)	RISTEK DIKTI

10	2019	Pengembangan Model Ekonomi Rumah Tangga Pasca Pemberdayaan Istri Nelayan Tradisional di Wilayah Pesisir Pantai Barat Kabupaten Barru (Year 2 - Researcher member)	RISTEK DIKTI
11	2019	Deteksi perubahan dan penilaian stok karbon hutan mangrove untuk mitigasi perubahan iklim di pulau Pannikiang kabupaten Barru Sulawesi Selatan (Principal researcher).	RISTEK DIKTI
12	2018	Deteksi Kesehatan Hutan Mangrove Dengan Metode Klasifikasi NDVI pada Citra Satelit Sentinel-2 di Kabupaten Mamuju Provinsi Sulawesi Barat (Principal researcher)	PNBP FMIPA UNM
13	2018	Strategi dan Desain Pengembangan Kawasan Ekowisata Mangrove di Kelurahan Bebunga Kecamatan Kalukku Kabupaten Mamuju (Year 1- Principal researcher)	RISTEK DIKTI
14	2018	Pengembangan Model Ekonomi Rumah Tangga Pasca Pemberdayaan Istri Nelayan Tradisional di Wilayah Pesisir Pantai Barat Kabupaten Barru (Year 1 - Researcher member)	RISTEK DIKTI
15	2018	Kajian Kesesuaian Lahan untuk Kawasan Rehabilitasi Mangrove di Pulau Sebatik Kalimantan Utara (Researcher member)	Dinas Kelautan Perikanan Propinsi Kalimantan Utara
16	2017	Assessment of Potentials for Payment for Mangrove Ecosystem Services in South Sulawesi Indonesia: Case study in Mangrove area of East Sinjai Sub-District (Principal researcher)	Southeast Asian Regional Centre for Tropical Biology (SEAMEO BIOTROP)
17	2017	Estimasi Stok Karbon Hutan Mangrove Kabupaten Sinjai Sulawesi Selatan Untuk Mitigasi Perubahan Iklim (Principal researcher)	PNBP Pascasarjana UNM
18	2017	Terapan Citra Remote Sensing untuk Monitoring Perubahan Land Use di DAS Hulu Utama Jeneberang Kecamatan Tinggimoncong Kabupaten Gowa Sulawesi Selatan (Anggota Peneliti)	PNBP FMIPA UNM
19	2017	Pengetahuan Masyarakat Adat Karampuang dalam Pengelolaan Lingkungan Hidup di Desa Tompobulu Kabupaten Sinjai (Researcher member)	PNBP FMIPA UNM
20	2017	Integrasi Sistem Informasi Geografi dan Persamaan Universal Soil Loss Equation Model untuk Prediksi Erosi di Daerah Aliran Sungai Tello (Researcher member)	PNBP FMIPA UNM

#### D. Community services experiences in past 5 years

No	Year	Title	Funder
1	2020	PKM - Rehabilitasi Kawasan Mangrove untuk Penanggulangan Abrasi Pantai di Desa Garassikang Kecamatan Bangkala Barat Kabupaten Jeneponto Sulawesi Selatan (Principal executor)	RISTEK DIKTI
2	2020	PKM - Pelatihan Pengenalan Drone dan Interpretasi Citra Foto Udara Bagi Siswa Madrasah Aliyah Negeri 1 Makassar (Principal executor)	PNBP UNM
3	2019	PKM - Pelatihan Sistem Informasi Geografi Bagi Guru Geografi SMA Negeri di Kabupaten Gowa (Principal executor)	PNBP UNM
4	2017	PKM - Pelatihan Penginderaan Jauh Bagi Guru Geografi SMA Negeri di Kabupaten Gowa (Principal executor)	PNBP UNM

#### E. Scientific publications in past 5 years

No.	Title	Volume/ Number/ Year	Jurnal, Quartile in Scimago, dan First/Co- author
1	The Potential Soil Organic Carbon Stocks in Mangrove Areas of Sinjai District, South Sulawesi, Indonesia	Under review	Journal of Environmental Engineering and Landscape Management, Q2, First author
2	Biomass carbon stock assessment of mangrove ecosystem in Pannikiang Island South Sulawesi Indonesia.	Under review	Indonesian Journal of Geography, Q3, First Author
3	The Regression Estimation Model of Post-empowerment Household with Consumption Function Theory	1088/1/2021	IOP Conference Series: Materials Science and Engineering. Co-author
4	Pelatihan Pengenalan Drone dan Interpretasi Citra Foto Udara bagi Siswa Madrasah Aliyah Negeri 1 Makassar	1/1/2021	INOVASI: Jurnal Hasil Pengabdian Masyarakat. First author
5	Mangrove Changes in Pannikiang Island Barru Regency South Sulawesi	1752/012088/2021	IOP Conference Series: Journal of Physics. Co-author
6	Assessment of Seawater Level, Inundation Duration and Substrate Elevation for Mangrove Rehabilitation	11/4/2020	International Journal of Conservation Science, Q1, Co-author

	Program in the Spermonde Archipelago South Sulawesi Indonesia		
7	New naphthoquinone derivatives from <i>Fusarium napiforme</i> of a mangrove plant.	In Press/2019 DOI: 10.1080/14786419.2019.1650358	<i>Natural Product Research</i> , Q2, Co-author
8	Biomass Carbon Stocks in the Mangrove Rehabilitated Area of Sinjai District South Sulawesi Indonesia Sinjai District.	13/3/2020	Geography Environment Sustainability, Q3, First Author
9	Comparison of physical-chemical conditions for seaweed cultivation in the Spermonde Archipelago, Indonesia	13/4/2020	AACL Bioflux, Q3, Co-author
10	Biodiversity assessment for the sustainability of mangrove ecotourism area in West Sulawesi Indonesia.	12/4/2019	AACL Bioflux, Q3, First Author
11	Meroterpenoids produced by <i>Pseudocosmospora</i> sp. Bm-1-1 isolated from <i>Acanthus ebracteatus</i> Vahl.	31/2019	Phytochemistry Letters, Q2, Co-author
12	Mapping and zonation level of landslides hazard and risk assessment: A case study of Enrekang Regency, South Sulawesi, Indonesia.	11/2/2018	Environment Asia, Q3, Co-author
13	The Approach of Logit Model to the Decision Making of Small-Scale Fisherman's Wives	6/12/2018	International Journal of Advanced Research, Co-author
14	Mapping of Socioeconomic Life of Fishermen Community in Maitara Island Tidore Kepulauan City in Maluku Utara Province	1/1/2017	UNM Geographic Journal, Co-author
15	Mangrove forest decline: Consequences for livelihoods and environment in South Sulawesi	17/1/2017	Regional Environmental Change, Q2, First Author
16	Mangrove exploitation effects on biodiversity and ecosystem services	24/11/2015	Biodiversity and Conservation, Q1, First Author.
17	Economic valuation of mangroves for comparison with commercial aquaculture in South Sulawesi Indonesia	6/9/2015	Forests, Q1, First Author

#### F. Book publications in the past five years

No.	Title	ISBN/Year	Publisher
1	Ekonomi Rumah Tangga Nelayan Skala Kecil Dengan Perspektif Ekonometrika (Penulis Anggota)	9786025554896/2019	Badan Penerbit UNM
2	Pariwisata dan Pengembangan Ekowisata Mangrove (Penulis Pertama)	9786025554971/2019	Badan Penerbit UNM

#### G. Copyright in past five years

No.	Title	Copyright number	Year
1	Buku: Ekonomi Rumah Tangga Nelayan Skala Kecil Dengan Perspektif Ekonometrika (Penulis Anggota)	000147354	2019
2	Policy Brief: Strategi Pengembangan Kawasan Ekowisata Mangrove di Kelurahan Bebunga Kecamatan Kalukku Kabupaten Mamuju Propinsi Sulawesi Barat (Penulis Pertama)	000153741	2019
3	Desain Lanskap Kawasan Ekowisata Mangrove Kelurahan Bebunga Kecamatan Kalukku Kabupaten Mamuju Propinsi Sulawesi Barat (Penulis Pertama)	000161328	2019

#### H. Seminars/Conferences in past five years

No.	Seminars/Conferences	Title of article	Time and place
1	The 2 <sup>nd</sup> Bali International Tourism Conference (BITC)	Assessing of Mangrove Biodiversity for Ecotourism Area Development in West Sulawesi	Udayana University, Denpasar, Bali, Indonesia, 8 – 10 November 2018
2	International Conference of Indonesian Society for	Assessment of hydrological conditions for mangrove rehabilitation in the Spermonde Archipelago	Patra Semarang Hotel & Convention, Semarang, Indonesia, 31 October – 1 November 2017.

	Remote Sensing (ICOIRS)		
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## I. Reviewer and Editorial Advisory Board of Jurnal in past five years

No.	Type of Reviewer dan journal name	Title of paper reviewed	Time and Publisher
1	Peer reviewer, Jurnal Sosial Ekonomi Kelautan dan Perikanan (Sinta 2)	Optimalisasi Pengembangan Usaha Budidaya Rumput Laut ( <i>Kappaphycus Alvarezii</i> ) di Perairan Teluk Kulisosu Kabupaten Buton Utara Provinsi Sulawesi Tenggara	Februari 2020, Balai Besar Riset Sosial Ekonomi Kelautan dan Perikanan, Badan Riset dan Sumber Daya Manusia Kelautan dan Perikanan, Kementerian Kelautan dan Perikanan
2	Peer reviewer, Jurnal Sosial Ekonomi Kelautan dan Perikanan (Sinta 2)	Prospek dan Peluang Usaha Pembenihan Ikan Papuyu ( <i>Anabas testudineus</i> ) Di Kalimantan Selatan	Januari 2020, Balai Besar Riset Sosial Ekonomi Kelautan dan Perikanan, Badan Riset dan Sumber Daya Manusia Kelautan dan Perikanan, Kementerian Kelautan dan Perikanan
3	Peer reviewer, Diversity and Distributions (Q1)	Modelling spatial biodiversity in the world's largest mangrove ecosystem - the Sundarbans: A baseline for conservation	Oktober 2018, Wiley Publisher
4	Peer reviewer, Environment, Development and Sustainability (Q2)	Nypa fruticans Leaf Collection as a Livelihood Strategy: A Case Study in the Sundarbans Impact Zone of Bangladesh	Nopember 2018, Springer Publisger
5	Peer reviewer, Journal Asian Journal of Environment and Ecology	Mangroves for protection of coastal areas from high tides, cyclone and tsunami	Juni 2018, ( <a href="http://www.sciedomain.org">www.sciedomain.org</a> )
6	Peer Reviewer, Advance Science Letters	a. Characteristics Analysis of Makassar Ethnic, Bugis, Toraja and Jawa in Metropolitan Makassar, Indonesia  b. Social, Economic, And Demographic Aspects Of Micro, Small, And Medium Enterprises	2 <sup>nd</sup> International Conference on Statistics, Mathematics, Teaching, and Research (ICSMTR), FMIPA UNM, Oktober 2017.

		(MSMEs) In Makassar City c. Fractal analysis of land surface temperature for geothermal site characterization d. Geophysical Exploration in Hot Water Region Soppeng Regency, Indonesia	
7	Peer reviewer, Asian Journal of Geography, Environment and Earth Science	Application of Satellite Imagery in the differentiation of the invasive species of Nypa from Mangrove vegetation	Desember 2017 (www.sciedomain.org)
8	Editorial Advisory Board	Journal of Bonoworo Wetlands	Mei 2017 – sekarang (https://smujo.id/bw/about/editorialTeam)
9	Editorial Advisory Board	Asian Journal of Forestry	Mei 2017 – sekarang (https://smujo.id/ajf/about/editorialTeam)
10	Editorial Advisory Board	Ocean Life Journal	Mei 2017 – sekarang (https://smujo.id/ol/about/editorialTeam)
11	Peer reviewer, Turkish Journal of Agriculture and Forestry (Q1)	Participatory Mangrove Forest Management in Malaysia - The case of Carey Island	Juni 2017 (http://online.journals.tubitak.gov.tr/manuscriptInfoForReview.htm)
12	Peer reviewer, Asian Journal of Environment and Ecology	Indigenous Land Tenure: System as a Hindrance to the Development of Pandam Wildlife Park	Nopember 2017 (www.sciedomain.org)
13	Peer reviewer, Journal of Biological Diversity (Biodiversitas) (Q3)	Dynamics of mangrove community in revegetation area of Karangsong, north coast of Indramayu District, West Java, Indonesia	Agustus 2016, (http://biodiversitas.mipa.uns.ac.id/D/reviewers.htm)
14	Peer reviewer, Journal of Scientific Research and Reports	Economic Valuation of Lengwe National Park Using The Travel Cost In Malawi	Mei 2016, (http://sciedomain.org/journal/22)
15	Scientific reviewer (external reviewer) pada BiodivERSA 2015 joint call	INDEPTHMAN: Indicators of Diversity and Ecosystem Processes through Time and space	Maret 2016, BodiVERSA (http://www.biodiversa.org)

		in High- versus low-diversity Mangroves	
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#### J. Professional Memberships

No.	Memberships	Year
1	Member of Society of Wetland Scientists	2018 - sekarang
2	Member of Indonesia Society for Remote Sensing (ISRS) (Masyarakat Penginderaan Jauh/MAPIN Indonesia)	2017 - sekarang

#### K. Awards in past 5 years

No.	Awards	Award-giving institution	Year
1	The best lecturer 1 of Faculty of Mathematics and Natural Sciences (FMIPA) Universitas Negeri Makassar (UNM)	FMIPA UNM	2020
2	The best lecturer 2 of Faculty of Mathematics and Natural Sciences (FMIPA) Universitas Negeri Makassar (UNM)	FMIPA UNM	2017
3	The best researcher 1 of Faculty of Mathematics and Natural Sciences (FMIPA) Universitas Negeri Makassar (UNM)	FMIPA UNM	2016

Makassar, 25 March 2021

Abdul Malik, S.T., M.Si., Ph.D.

## Member of researcher (1)

Name : Dr. Abd. Rahim, S.P., M.Si.  
 NIP/ NIDN : 19731212 200501 1001/ 0012127302  
 Place & date of birth : Ujung Pandang, December, 12, 1973  
 Department/Faculty : Development Economic Program, Economics Department Faculty of Economics, Universitas Negeri Makassar  
 Field of Sciences : Agricultural Economics and Agribusiness  
 Academic ranks : Associate Professor  
 Civil servant ranks : Pembina Tingkat I / IVb  
 Home address : Bitowa Lama III No.16 Borong, Makassar City, Indonesia  
 Telephone / e-mail : 0815 240 31697/ [abd.rahim@unm.ac.id](mailto:abd.rahim@unm.ac.id)  
 Sinta ID (49836) :  
<http://sinta.ristekbrin.go.id/authors/detail?id=49836&view=overview>  
 Scopus ID (57211321420) :  
<https://www.scopus.com/authid/detail.uri?authorId=57211321420>  
 Web of Science ResearchID (C-9470-2018) : <https://publons.com/researcher/1394115/abd-rahim/>  
 Google Scholar ID : <https://scholar.google.com/citations?user=xgqOM3UAAAAJ>  
 Researchgate : [https://www.researchgate.net/profile/Abd\\_Rahim2/research](https://www.researchgate.net/profile/Abd_Rahim2/research)  
 Orcid : <https://orcid.org/0000-0002-1720-7150>  
 Linkedin : [https://www.linkedin.com/feed/?trk=reset\\_password](https://www.linkedin.com/feed/?trk=reset_password)  
 Academia Edu :  
<https://universitasnegerimakassar.academia.edu/DRABDRAHIMSPMSiUNM>  
 Teaching subjects : Agricultural Economics, Econometrics, Microeconomics, Agribusiness Economics Maritime, and Economic Research Methodology

## I. EDUCATION

### a. Primary and Secondary Education

Education	Place	Graduates	Majors	Headmaster
Kindergarten	TK Nurul Falah, Ujung Pandang	12 June 1980	-	Dra. Ny. A.B. Marda Yusuf
Elementary School (ES)	SD PPSP IKIP, Ujung Pandang	21 May 1986	-	Drs. Ahmad Satullah
Middle School (MS)	SMP Negeri 3, Ujung Pandang	1 June 1989	-	Muhammad Thaha
High School (HS)	SMA Negeri 2, Ujung Pandang	12 June 1992	Natural Science	Abd. Latief Mosseng

**b. Higher Education**

Education	Place	Date of Graduate	Degree	Program	Rector
Non-degree (D3)	Unhas, Ujung Pandang	24 Feb 1997	-	Agribusiness	Prof.Dr.Basri Hasanuddin, M.A.
Bachelor (S1)	Unhas, Makassar	1 Mar 2000	S.P.	Agricultural Socio-Economic	Prof.Dr.Ir.Radi A Gani
Master (S2)	UGM, Jogjakarta	25 Jan 2003	M.Si.	Master in Agribusiness Management	Prof.Dr.Sofian Efendi
Doctoral (S3)	UGM, Jogjakarta	6 May 2010	Dr.	Agricultural Economics	Prof.Ir.Sujarwadi, M.Eng., Ph.D

**III. Bachelor and Master Thesis, and Dissertation Doctoral**

Scientific Paper	Title	Yudisium	Mentor/ Promotor
Field Practice Report	“Teknik Pemangkasan Kakao di Kelurahan Lembang Gantarang Keke Kabupaten Bantaeng (1997)”	<i>Very Satisfy</i>	1. Ir.Nasaruddin Razak,M.P. 2. Ir. Rapiuddin, M.P
Skripsi	“Manajemen Produksi dan Pemasaran Abon Ikan Tuna UD. Citra Makassar Indah di Kelurahan Bangkala, Kecamatan Perwakilan Manggala, Kotamadya Makassar (2000)”	<i>Very Satisfy</i>	1. Dr.Ir.Akhsan, M.S. 2. Ir. Rahmadani, M.S.
Thesis	“Analisis Margin Pemasaran Ikan Laut Segar di Kabupaten Kulon Progo (Januari 2003)”	<i>Very Satisfy</i>	1. Dr.Ir.Masyhuri
Disertation	“Analisis Harga Ikan Laut Segar dan Pendapatan Usaha Tangkap Nelayan di Sulawesi Selatan (Mei 2010)”	<i>Cum Laude</i>	1. Prof.Dr.Ir.H.Masyhuri 2. Dr.Ir.Slamet Hartono, M.Sc 3. Prof.Dr.Ir.H.Dwidjono Hadi Darwanto,S.U.

#### **IV. SCIENTIFIC PAPER (*Book, Journal, Proceeding, research report, & HaKI*)**

##### **a. Book-ISBN (*International Standard of Book Number*)**

1. “*Sistem Manajemen Agribisnis*” (ISBN : 979-8416-767) Penerbit Universitas Negeri Makassar (UNM) Makassar, dibiayai oleh Badan Penerbit UNM Anggaran 2005 (Makassar, Agustus 2005) => *Buku Ajar*  
<http://eprints.unm.ac.id/3893/>
2. “*Ekonomika Pertanian (Pengantar, Teori, dan Kasus)*”, (ISBN : 978-979-002-055-9) Penerbit Penebar Swadaya (PS), dibiayai oleh Badan Penerbit Penebar Swadaya Sumber Informasi Pertanian (Jakarta, April 2007) => *Buku Ajar*
3. “*Model Analisis Ekonomika Pertanian*”(ISBN : 978-602-9075-46-5) Penerbit Universitas Negeri Makassar (UNM) Makassar, dibiayai oleh Badan Penerbit UNM Anggaran 2012 (Makassar, April 2012) => *Buku Ajar*  
<http://eprints.unm.ac.id/3891/>
4. “*Model Ekonometrika Perikanan Tangkap*” (ISBN : 978-602-9075-56-4) Penerbit Universitas Negeri Makassar (UNM) Makassar, dibiayai oleh Badan Penerbit UNM Anggaran 2012 (Makassar, Mei 2012) => *Buku Referensi*  
<http://eprints.unm.ac.id/3890/>
5. “*Pendekatan Fungsi Cobb-Douglas dalam Ekonomi Produksi Pertanian*” (ISBN : 602-143-612-1) Penerbit CaraBaca Makassar, dibiayai oleh Anggaran Hibah Penelitian Fundamental Tahun 2013, (Makassar, November 2013) => => *Buku Monografi*
6. “*Ekonomi Nelayan Pesisir dengan Pendekatan Ekonometrika*” (ISBN : 978-602-1175-04-0) Penerbit CaraBaca Makassar, dibiayai oleh Anggaran Hibah Penelitian Fundamental Tahun 2014, (Makassar, November 2014) => *Buku Referensi*  
<http://eprints.unm.ac.id/3888/>
7. “*Landasan Teori ekonomi dengan Model Fungsi Persamaan (Telaah Kasus Penelitian)* (ISBN : 978-602-1175-17-0), Penerbit CaraBaca Makassar, dibiayai oleh Anggaran Hibah Penelitian Hibah Bersaing Tahun 2016, (Makassar, Agustus 2016) => *Buku Ajar*  
<http://eprints.unm.ac.id/3886/>
8. “*Ekonomi Rumah Tangga Nelayan Skala Kecil dengan Perspektif Ekonometrika*” (ISBN : 978-602-5554-89-6) Penerbit UNM Makassar, dibiayai oleh Anggaran Penelitian Hibah Kompetensi 2018-2019, (Makassar, Juni 2019) => *Buku Referensi*  
<http://eprints.unm.ac.id/cgi/users/home?screen=EPrint%3A%3AView&eprintid=14333>
9. “*Pariwisata & Pengembangan Ekonomi Mangrove*” (ISBN : 978-602-5554-97-1) Penerbit UNM Makassar, (Makassar, Juli 2019) => *Buku Referensi*  
[https://www.researchgate.net/publication/336638445\\_Pariwisata\\_dan\\_Pengembangan\\_Ekowisata\\_Mangrove](https://www.researchgate.net/publication/336638445_Pariwisata_dan_Pengembangan_Ekowisata_Mangrove)

##### **b. Journal (*International & National*)**

###### **- International**

1. “*Applied Multiple Regression Method with Exponential Functions: an Estimation of Traditional Catch Fishermen Household Income.* Journal of Physics : Conference Series. Volume 1028 Nomor 1 (2018:1-8), ISSN :17426588, SJR=0,241; (*Indexing : Scopus, SCImago Journal Rank*)

- <https://www.scopus.com/record/display.uri?eid=2-s2.0-85048881645&origin=inward&txGid=71c35b721089758dbc12fe609c28812e>
2. “*Estimation of Household Consumption Expenditure of Small-Scale Fishermen in Indonesia*”. Russian Journal of Agricultural and Socio-Economic Sciences. Volume 11 Nomor 83 (2018:375-383); (*Indexing : EBSCO host, DOAJ, Crossref, AGRIS, AIMS, Orcid, CIARD, Publons*)  
[https://rjoas.com/issue-2018-11/article\\_45.pdf](https://rjoas.com/issue-2018-11/article_45.pdf)
  3. “The Approach of Logit Model to the Decision Making of Small-Scale Fisherman Wives”. International Journal of Advanced Research. Volume 6 Nomor 12 (2018:1219-1225). ISSN 2320-5407; (*Indexing : Index Copernicus Value, DOAJ, CiteFactor, ResearchGate, Crossref*)  
[http://www.journalijar.com/uploads/644\\_IJAR-25492.pdf](http://www.journalijar.com/uploads/644_IJAR-25492.pdf)
  4. “The Applied of Cobb-Douglas Production Function with Determinants Estimation of Small-Scale Fishermen's Catches Production. International Journal of Oceans and Oceanography. Volume 13 Nomor 11 (2019:81-95). ISSN 0973-2667 => (*Indexing : Web of Science, Clarivate Analytics, Zoological Record, Google Scholar, JournalSeek, J-Gate, EBSCOhost, ICI Index Copernicus.*)  
[https://www.ripublication.com/ijoo19/ijoov13n1\\_07.pdf](https://www.ripublication.com/ijoo19/ijoov13n1_07.pdf)
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18. “*Penilaian Implikasi Kebijakan Program Bantuan Sarana dan Prasarana terhadap Peningkatan Ekonomi Rumah Tangga Nelayan Tangkap Tradisional*” Jurnal Ekonomi Pembangunan Dan Pertanian Volume 1 Nomor 2, ISSN : 2252-4878, Program Studi Ekonomi Pembangunan Universitas Negeri Makassar (Mei 2016:63-78)  
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  26. “*Pengaruh Lama Melaut, Kekuatan Mesin Tempel, dan Karakteristik Responden terhadap Pendapatan Nelayan Tangkap Tradisional di Kabupaten Takalar*”. Jurnal Agrisocionomics (Jurnal Sosial Ekonomi dan Kebijakan Pertanian). Volume 2 Nomer 1 (Mei 2018:50-57) (*Terindeks : Sinta 3, Google Scholar, Crossref*)  
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**c. Proceeding (International & National)**

- *Internasional*

1. "Demand Estimation of Fresh Sea Fish with Panel Data Model" International Conference on Education, Science, Art and Technology (ICESAT). 1(1):278-287. ISBN. 2581-1886. Venue: Four Points by Sheraton, Makassar Jl. Landak Baru No.130, Kota Makassar (22 – 23 July 2017: 278-287)  
<https://ojs.unm.ac.id/icesat/article/view/4758>
2. "Comparative Perspective Decisions of Small-Scale Fisherman Wives By Using Outboard Motor and Non-Powered Motor in Choosing Empower Capture Fish Processing Business". Proceedings of the 1st International Conference on Advanced Multidisciplinary Research (ICAMR, 2018). Series : Advances in Social Science, Education and Humanities Research (ASSEHR). "Enhancing Sustainable Development through Advanced Multidisciplinary Research". ISSN : 2352-5398, ISBN : 978-94-6252-706-5, volume 227:550-554. Research Institute of Universitas Negeri Makassar at Four Point Hotel, Makassar, from Saturday to Sunday, 6-7 October 2018. Publisher Atlantis Press (*Indexing : Web of Science*)  
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3. "The Regression Estimation Model of Post-empowerment Household wit Consumption Function Theory" Annual Conference on Computer Science and Engineering Technology (AC2SET) 23dr September 2020, Medan, Indonesia (23 September 2021). Publisher IOP Conference Series : *Materials Science and Engineering*. Volume 1088. Publisher IOP Conferense Series (*Indexing : Scopus*)  
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- *National*

1. "Efisiensi Teknis Usaha Karamba Jaring Apung Ikan Kerapu Bebek di Sulawesi Tenggara". Dalam Rangka Dies Natalis Ke-61 Fakultas Pertanian Universitas Gadjah Mada (UGM), Kebijakan Pemanfaatan Lahan untuk Kesejahteraan Petani, *Prosiding* : ISBN : 978-979-8678-15-8 (September 2007:43-48)
2. "Fluktuasi Harga Ikan Pelagis Kecil Segar pada Pasar Produsen dan Konsumen". Seminar Nasional Riset dan Kebijakan Sosial Ekonomi Kelautan dan Perikanan Tahun 2012, judul *Prosiding* "Peran Hasil Penelitian Sosial Ekonomi Kelautan dan Perikanan dalam Mendukung Pembangunan Kelautan dan Perikanan untuk Merespon Tantangan Kontemporer", kerjasama dengan Balai Besar Penelitian Sosial Ekonomi Kelautan dan Perikanan (BBPSEKP), *Indonesia Marine and Fisheries Socio-Economics Research Network* (IMFISERN), dan Lembaga Ilmu Pengetahuan Indonesia (LIPI), *Prosiding* : ISBN : 978-979-3893-72-3 (September 2012:699-712)

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3. “Determinan Margin Pemasaran Ikan Pelagis Kecil”. Seminar Nasional Riset dan Kebijakan Sosial Ekonomi Kelautan dan Perikanan Tahun 2013, judul *Prosiding “Memperkuat Implementasi Hasil Penelitian Sosial Ekonomi dalam Mendukung Percepatan Industrialisasi di Sektor Kelautan dan Perikanan Berbasis Blue Economy”*, kerjasama dengan Balai Besar Penelitian Sosial Ekonomi Kelautan dan Perikanan (BBPSEKP), *Indonesia Marine and Fisheries Socio-Economics Research Network* (IMFISERN), dan Fakultas Perikanan dan Kelautan (FPIK) Universitas Diponegoro, *Prosiding* : ISBN : 978-979-3893-79-2 (Desember 2013:231-240)  
<http://digilib.unm.ac.id/gdl.php?mod=browse&op=read&id=unm-digilib-unm-abdrahim-134>
4. “Estimasi Keputusan Nelayan Tradisional Dalam Memilih Alat Tangkap”. Seminar Nasional 2016, Judul *Prosiding “Mega Trend Inovasi dan Kreasi Hasil Penelitian dalam Menunjang Pembangunan Berkelanjutan, Prosiding ISBN : 978-602-9075-25-7*, diselenggarakan oleh Lembaga Penelitian UNM Makassar (2 Juni 2016 :393-398)”  
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5. “Faktor-Faktor yang Mempengaruhi Margin Pemasaran Kepiting Segar” Simposium Nasional Krustacea 2017, Judul *Prosiding “Menuju Pengelolaan Perikanan Krustacea yang Berkelaanjutan di Indonesia, Prosiding ISBN : 978-979-789-054-4*, Diselenggarakan Oleh Pusat Riset Perikanan Badan Riset Dan Sumber Daya Manusia Kelautan Dan Perikanan & World Wildlife Fund (Wwf)-Indonesia (15-16 Mei 2017:187-197)  
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6. “Pengaruh Volume dan Saluran Pemasaran terhadap Margin Pemasaran Telur Ikan Terbang Segar” Proceeding of National Seminar, Published by Research Institute of Universitas Negeri Makassar, 27 Agustus 2017 (27-28 Agustus 2017:73-77)  
<http://ojs.unm.ac.id/index.php/semnaslemlit/article/view/3744>
7. “Permodelan Ekonometrika dengan Eviews 9 pada Civitas Akademik Universitas Muhammadiyah Makassar” Seminar Nasional Hasil Pengabdian kepada Masyarakat” Judul Prosiding (ISBN : 978-603-555-459-9) Menumbuhkan Jati Diri Perguruan Tinggi Unggul melalui Pengabdian Masyarakat yang Inovatif Berbasis Ekonomi Kreatif”, Diselenggarakan Oleh Lembaga Pengabdian Masyarakat UNM 8 September 2018  
<http://ojs.unm.ac.id/semnaslpm/article/view/7661/4441>
8. “Aplikasi EVViews 10 Student Lite dengan Analisis Data Panel pada Mahasiswa Program Studi Agribisnis” Seminar Nasional Hasil Pengabdian kepada Masyarakat” Judul Prosiding (ISBN: 978-623-7496-01-4) Penguatan Peran Perguruan Tinggi dalam Akselerasi Pembangunan Sumberdaya Manusia, Diselenggarakan Oleh Lembaga Pengabdian Masyarakat UNM 5 Oktober 2019  
<http://ojs.unm.ac.id/semnaslpm/article/view/7661/4441>
9. “Pelatihan Teknik Penulisan Artikel Ilmiah Internasional Bereputasi dan Nasional Terakreditasi Mahasiswa Program Pascasarjana Universitas Negeri Makassar”.

Seminar Nasional Hasil Pengabdian kepada Masyarakat” Judul Prosiding (ISBN: 978-623-7496-01-4) Peluang dan Tantangan Pengabdian Kepada Masyarakat yang Inovatif di Era Kebiasaan Baru, Diselenggarakan Oleh Lembaga Penelitian dan Pengabdian Masyarakat (LP2M) UNM 24 Oktober 2020  
<https://ojs.unm.ac.id/semnaslpm/article/view/15807/0>

**d. Research Report**

1. “*Pengukuran Potensi Jiwa Entrepreneurship Mahasiswa Fakultas Ekonomi dan Ilmu Sosial Universitas Negeri Makassar (Suatu Kajian Aspek Emotional Quotient)*” sebagai Ketua Peneliti pada Penelitian Dosen Muda, dibiayai oleh Direktorat Jenderal Pendidikan Tinggi Departemen Pendidikan Nasional, sesuai dengan Surat Perjanjian Pelaksanaan Penelitian, Nomor : 030/SP3/ PP/DP2M/ II/2006 tanggal 01 Februari 2006 (Makassar, Februari 2006 s.d. Juli 2006)
2. “*Analisis Faktor-faktor yang mempengaruhi Fluktuasi Harga Ikan Layang di Pasar Produsen dan Konsumen Kabupaten Barru Periode Tahun 1990-2009*” sebagai Ketua Peneliti pada Penelitian PNBP FE UNM, dibiayai oleh DIPA Universitas Negeri Makassar Nomor : 0762/02304.2.01/ 23/2003 sesuai surat Keputusan Rektor Universitas Negeri Makassar Nomor : 1595/UN 36/PL/2011 Tanggal 21 Juni 2011(Juli 2011 s.d. Oktober 2011)
3. “*Analisis Faktor-faktor yang mempengaruhi Produksi dan Produktivitas Hasil Tangkapan di Wilayah Perairan Laut Sulawesi Selatan Periode Tahun 1986-2011*” sebagai Ketua Peneliti pada Penelitian PNBP FE UNM, dibiayai oleh DIPA Universitas Negeri Makassar Nomor : 0762/023-04.2.01/ 23/2012 sesuai surat Keputusan Rektor Universitas Negeri Makassar Nomor : 1397/ UN36/ PL/2012 Tanggal 4 Juli 2012 (Juli 2012 s.d. Oktober 2012)
4. “*Pengembangan Model Ekonomi Rumah Tangga Nelayan Tradisional di Wilayah Pesisir Pantai Barat Kabupaten Barru (Tahun-1/2013-Tahun-2/2014)*” sebagai Ketua Peneliti pada Penelitian Fundamental DIKTI, Tahun-1=> Dibiayai oleh DIPA Universitas Negeri Makassar Nomor : 023. 04.2.415222/2013, Tanggal 5 Desember 2012 sesuai Keputusan Rektor Universitas Negeri Makassar Nomor : 468/UN36/PL/2013 tanggal 6 Maret 2013 (Juni 2013 s.d. November 2013)  
<http://eprints.unm.ac.id/4003/>. Tahun-2 => Dibiayai oleh DIPA Universitas Negeri Makassar Nomor : 334/UN36/PL/2014, Tanggal 25 Februari 2014 yang dibebenkan kepada DIPA Universitas Negeri Makassar Nomor : 23.04.2.415222/2014, 5 Desember 2013 (Juni 2014 s.d. November 2014)  
<http://eprints.unm.ac.id/3997/>
5. “*Kajian Analisis Faktor-Faktor Yang Mempengaruhi Permintaan Ikan Laut Segar di Pasar Konsumen Sulawesi Selatan Periode Tahun 1995-2012*” sebagai Ketua Peneliti pada Penelitian PNBP FE UNM, Dibiayai oleh DIPA Universitas Negeri Makassar Nomor : 023.04.2.415222/2013, Tanggal 3 Juni 2013 sesuai Keputusan Rektor Universitas Negeri Makassar Nomor : 1351/UN36/PL/2013 tanggal 5 Desember 2012 (Juli 2013 s.d. Oktober 2013)
6. “*Pengaruh Harga Rill dan Produksi Waktu Lalu serta Perbedaan Wilayah terhadap Penawaran Ikan Laut Segar di Sulawesi Selatan Periode Tahun 1996-2013*” sebagai

Ketua Peneliti pada Penelitian PNBP FE UNM, Dibiayai oleh DIPA Universitas Negeri Makassar Nomor : 023.04.2.415222/2014, Tanggal 5 Desember 2013 sesuai Keputusan Rektor Universitas Negeri Makassar Nomor : 880/ UN36/ PL/2014 tanggal 23 Mei 2014 (Juni 2014 s.d. September 2014).

7. “*Pengembangan Model Strategi Pemberdayaan Wanita Nelayan Untuk Meningkatkan Ekonomi Rumah Tangganya Di Wilayah Pesisir Pantai Barat Kabupaten Barru (Tahun-1/2015 s.d. Tahun-2/2016)*” sebagai Ketua Peneliti pada Penelitian Hibah Bersaing DIKTI, Tahun-1 => Berdasarkan Surat Perjanjian Pelasanaan Hibah penelitian Tahun 2015 Batch 1 Nomor 060/SP2H/DITLITABMAS/II/ 2015, dan Surat Keputusan Rektor Universitas Negeri Makassar Nomor 681/UN36/PL/2015 Tanggal 18 Februari 2015 yang dibebankan kepada DIPA Ditlitabmas Dikti Nomor :023.04.1.673453/2015, Tanggal 14 November 2014 (April 2015 s.d. Oktober 2015)  
<http://eprints.unm.ac.id/4000/>. Tahun-2=>Berdasarkan Surat Perjanjian Pelasanaan Hibah penelitian Tahun 2016 Batch 1 Nomor 050/SP2H/LT/DRPM/II/2016, dan Surat Keputusan Rektor Universitas Negeri Makassar Nomor 996/UN36/LT/2016 Tanggal 26 Februari 2016 (Maret 2016 s.d. Agustus 2016)  
<http://eprints.unm.ac.id/3998/>
8. “*Dampak Fluktuasi Harga Komoditas Substitusi dan Pendapatan Per Kapita terhadap Keseimbangan Harga Dinamis Jangka Panjang Ikan Laut Segar di Sulawesi Selatan*” sebagai Anggota Peneliti pada Penelitian PNBP FE UNM, Dibiayai oleh DIPA Universitas Negeri Makassar Nomor : SP DIPA-042.04.2.400104/2015, Tanggal 15 April 2015 sesuai Keputusan Rektor Universitas Negeri Makassar Nomor : 1497/UN36/PL/2015 Tanggal 5 Mei 2015 (Juli 2015 s.d. Oktober 2015).
9. “*Analisis Faktor-faktor yang mempengaruhi Permintaan dan Penawaran Ikan Laut Segar di Sulawesi Selatan*” sebagai Ketua Peneliti pada Penelitian PNBP Pascasarjana UNM, Dibiayai oleh DIPA Universitas Negeri Makassar Nomor : 023.04.2.415222/2014, Tanggal 5 Desember 2014 sesuai Keputusan Rektor Universitas Negeri Makassar Nomor : 1501/ UN36/ PL/2015 tanggal 5 Mei 2015 (Mei 2015 s.d. Oktober 2015).
10. “*Analisis Faktor-faktor yang mempengaruhi Fluktuasi Harga Ikan Laut Segar di Sulawesi Selatan*” sebagai Ketua Peneliti pada Penelitian PNBP Pascasarjana UNM, Dibiayai oleh DIPA Universitas Negeri Makassar Nomor : 042.01:2.400964/2016, Tanggal 7 Desember 2015 Sesuai Keputusan Rektor Universitas Negeri Makassar Nomor : 4673/UN36/LT/2016 (Juni 2016 s.d. Oktober 2016).  
<http://eprints.unm.ac.id/4107>
11. “*Assessment of Potentials for Payment for Mangrove Ecosystem Services in South Sulawesi Indonesia*”.Anggota Peneliti. Final Report DIPA Biotrop 2017. Southeast 470 Asian Regional Centre for Tropical Biology (SEAMEO BIOTROP), Bogor, West Java. 471
12. “*Permodelan Ekonometri Produktivitas Tangkapan Dan Permintaan Ikan Laut Segar Di Sulawesi Selatan*” sebagai Ketua Peneliti pada Penelitian PNBP Pascasarjana UNM, Dibiayai oleh DIPA Universitas Negeri Makassar Nomor : 042.01:2.400964/2017, Tanggal 7 Desember 2016 Sesuai Keputusan Rektor

Universitas Negeri Makassar Nomor : 2900/UN36/LT/2017 (Juli 2017 s.d. Oktober 2017).

<http://eprints.unm.ac.id/4001/>

13. “*Pengembangan Model Ekonomi Rumah Tangga Pasca Pemberdayaan Istri Nelayan Tradisional Di Wilayah Pesisir Pantai Barat Kabupaten Barru (Tahun-1/2018 s.d. Tahun-2/2019)*” sebagai Ketua Peneliti. Tahun-1 => Penelitian Berbasis Kompetensi, Direktorat Riset dan Pengabdian Masyarakat Direktorat Jenderal Penguatan Riset dan Pengembangan, Kementerian Riset, Teknologi, dan Pendidikan Tinggi, Sesuai dengan Kontrak Penelitian Tahun Anggaran 2018. Nomor : 23/UN36.9/PL/2018 (Juni 2018 s.d Oktober 2018). Tahun-2 => Penelitian Dasar, Direktorat Riset dan Pengabdian Masyarakat Direktorat Jenderal Penguatan Riset dan Pengembangan, Kementerian Riset, Teknologi, dan Pendidikan Tinggi, Sesuai dengan Kontrak Penelitian Tahun Anggaran 2019. Nomor : 73/ UN36.9/ PL/ 2019 (Juli 2019 s.d November 2019)
14. “*Strategi Dan Desain Pengembangan Kawasan Ekowisata Mangrove Di Kelurahan Bebanga Kecamatan Kalukku Kabupaten Mamuju (Tahun-1/2018 s.d. Tahun-2/2019)*” sebagai Anggota Peneliti pada Penelitian Terapan Unggulan Perguruan Tinggi Direktorat Riset dan Pengabdian Masyarakat Direktorat Jenderal Penguatan Riset dan Pengembangan, Kementerian Riset, Teknologi, dan Pendidikan Tinggi, Sesuai dengan Kontrak Penelitian Tahun Anggaran 2018
15. “*Analisis Faktor-faktor yang mempengaruhi Keputusan Bertahan Hidup Nelayan Tradisional Saat Pandemi Covid-19 dan New Normal di Wilayah Pesisir Pantai Barat Kota Makassar* sebagai Ketua Peneliti pada Penelitian PNBP Fakultas Ekonomi UNM, Dibiayai oleh DIPA Universitas Negeri Makassar Nomor : 023.17.2677523/2020, Tanggal 29 April 2020 sesuai Keputusan Rektor Universitas Negeri Makassar Nomor : 363/ UN36/ HR/2020/ HK/2020 tanggal 12 Mei 2020 (Maret 2020 s.d. November 2020).

**e. Intellectual Property Rights**

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4. Copyright from the Republic of Indonesia Ministry of Law and Human Rights; Type of Creation => *Reference Book*; Title of Creation => " Model Ekonometrika Perikanan

- Tangkap "; Application Number and Date (EC00201822937, 6 August 2018); Registration Number (000113467)
5. Copyright from the Indonesian Ministry of Law and Human Rights; Type of Creation => *Reference Book*; Title of Creation => " Ekonomi Nelayan Pesisir dengan Permodelan Ekonometrika "; Application Number and Date (EC00201822930, 6 August 2018); Registration Number (000113466)
  6. Copyright from the Indonesian Ministry of Law and Human Rights; Type of Creation => *Textbooks*; Title of Creation => " Landasan Teori Ekonomi dengan Model Fungsi Persamaan "; Application Number and Date (EC00201822931, 6 August 2018); Registration Number (000113465)  
<http://eprints.unm.ac.id/cgi/users/home?screen=EPrint%3A%3AView&eprintid=14342>
  7. Copyright from the Republic of Indonesia Ministry of Law and Human Rights; Type of Creation => *Reference Book*; Title of Creation => " Ekonomi Rumah Tangga Nelayan Skala Kecil dengan Perfektif Ekonometrika"; Application Number and Date (EC00201946455, 19 July 2019); Registration Number (000147354)  
<http://eprints.unm.ac.id/cgi/users/home?screen=EPrint%3A%3AView&eprintid=14340>
  8. Copyright from the Indonesian Ministry of Law and Human Rights; Type of Creation => *Scientific Paper*; Title of Creation => " Policy Brief : Strategi Pengembangan Ekonwisata Mangrove di Kelurahan Bebunga Kecamatan Kaluku Kabupaten Mamuju Provinsi Sulawesi Barat"; Application Number and Date (EC00201970494, 9 September 2019); Registration Number (000153741)  
<http://eprints.unm.ac.id/cgi/users/home?screen=EPrint%3A%3AView&eprintid=14992>
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<http://eprints.unm.ac.id/id/eprint/16231>

## **VIII. AWARDS AND ACHIEVEMENTS**

1. Certificate of Outstanding Lecturer I at the Faculty of Economics and Social Level of Universitas Negeri Makassar in the assessment of Featured Works (Dikti Research) and Tri Dharma of Higher Education (Education and Teaching, Research, Community Service, and Support) (Makassar, August, 17-2012)
2. Educator Certificate (Certificate No.: 11-001027-02503) "Passed the Lecturer Certification and Declared as a Professional Lecturer in the field of Agricultural Economics" Registration Number: 11100103613459 (Surakarta, November 14, 2011)
3. Certificate of Exemplary Lecturer with Achievement at the Faculty of Economics at Universitas Negeri Makassar in the assessment of Flagship Work and Tri Dharma of Higher Education (Makassar, August, 17-2013)

4. Outstanding Lecturer Certificate of Achievement, I at the Faculty of Economics Level at Makassar State University in the assessment of Flagship Works and Higher Education Tri Dharma (Makassar, 8 August 2014)
5. The Best Poster Certificate at the 2013-2014 Fundamental Research Results Seminar from the Director of Research and Community Service Dirjen Dikti at the Singgasana Hotel Makassar (Makassar, 30 April to 1 May 2015)
6. Charter of Honor Satyalancana by Sapta X Tahun, Presidential Decree No. 26 / TK / 2018 from the President of the Republic of Indonesia (Makassar, August, 17-2018)

## **IX. PROFESSIONAL MEMBERSHIPS**

1. Member of KAGAMA Program Studi Magister Manajemen Agribisnis Universitas Gadjah Mada Jogjakarta (Jogjakarta, Januari 2003 s.d. Sekarang)
2. Member of KAGAMA, Master Program of Agribusiness Management at Universitas Gadjah Mada (Jogjakarta, January 2003 to present)
3. Chairperson of the Research Institute for Management Study and Development of Cooperatives of Small and Medium Enterprises, Cooperative Economic Education Program, Universitas Negeri Makassar, (Makassar, February 2006 to February 2008)
4. Secretary 1 of the KAGAMA, Master Program of Agribusiness Management at Universitas Gadjah Mada (Jogjakarta, May 3, 2009 to May 3, 2014)
5. KAGAMA Members of the Agricultural Economics Doctoral Program at Universitas Gadjah Mada (Jogjakarta May 2010 to present)
6. Member of the Indonesian Marine and Fisheries Socio-Economics Research Network (IMFISERN) Jakarta Center for Marine Socio-Economic and Fisheries Research (Jakarta, November,23-2010 to November 2017)
7. Chair of the Economic Development Program, Faculty of Economics, Universitas Negeri Makassar (2012-2016)
8. Member of the *Asosiasi Agribisnis Indonesia (AAI)*, Department of Agribusiness, Faculty of Economics and Management – Institut Pertanian Bogor (Bogor, February 2017 to Present)
9. Head of Economic Development Laboratory of the Faculty of Economics Universitas Negeri Makassar (2017-present)

## **X. PEER REVIEWER OF INTERNATIONAL AND NATIONAL JOURNALS**

1. *Internal Reviewer* from *Jurnal Agribis* (Media Komunikasi Hasil-hasil Penelitian Primer Agribisnis dan Kajian-kajian Sosial Ekonomi) ISSN: 2089-449X, Publish by Sekolah Tinggi Ilmu Pertanian (STIPER) Maros, Agribusiness Program, Yayasan Perguruan Islam Maros, SK.No.010/SK/ STIPER/ YAPIM/2012 (Makassar, March 2012 - October 2015)
2. *Internal Reviewer* and Chair of the Editorial Board from *Jurnal Ekonomi Pembangunan dan Pertanian* (Media Komunikasi Ilmiah Hasil-hasil Penelitian Ilmu Ekonomi) ISSN : 2252-4878, Publish by Development Economic Program, Faculty of Economics, Universitas Negeri Makassar, SK No.1785/UN36.22/KP/2013, (Makassar, May 2012 - November 2016)

3. Internal Reviewer from *Jurnal Al-Mashrafiyah (Jurnal Ekonomi, Keuangan dan Perbankan Syariah)* (Sinta Accredited 3<sup>rd</sup>) ISSN Printed: 2597-4904 & ISSN Online: 2620-5661, Islamic Banking Department, Faculty of Economics and Business Islam, Universitas Islam Negeri Alauddin Makassar, SK No.62 Tahun 2018. (Makassar, May 2018 to present)
4. External Reviewer from *International Symposium in Environmental Science and Industrial Ecology (ISESIE) 2018 for Manuscripts Submitted to E3S Web of Conferences* (e-ISSN: 2267-1242) (Bangkok, December 11-12, 2018)
5. External Reviewer from Journal of Sustainability Science and Management in Review of Manuscript ID JSUSM-2018-0089.R3, (*Indexing: Web of Science & Scopus*) (Malaysia, Mei, 2019)
6. Internal Reviewer from *Jurnal Agrisocionomics* (Sinta Accredited 3<sup>rd</sup>) ISSN Printed: 2597-4904 & ISSN Online: 2620-5661, Department of Socio-Economic and Agricultural Policy, Faculty of Animal Husbandry, Universitas Diponegoro, SK No.63/UN7.5.5/PB/2019 (Semarang, July 2019 to present)
7. Internal Reviewer Tetap *Jurnal EcceS (Economics, Scocial, Development Studies)* (Sinta Accredited 5<sup>th</sup>), Economic Studies Program, Faculty of Economics and Business Islam, Universitas Islam Negeri Alauddin Makassar (Makassar, May 2019 to present)
8. External Reviewer from *Journal of Socioeconomics and Development in Review of Manuscript ID - JSeD*, (Sinta Accredited 3), (Malang, 23 Juni 2020)
9. Internal Reviewer from *Jurnal El-Dinar* (Sinta Accredited 3) ISSN Online: 2622-0822, Faculty of Economics, Universitas Islam Negeri Maulana Malik Ibrahim (Malang, 22 July 2020 to present)
10. Peer Reviewer from *International Journal of Agricultural Economics*. ISSN Online: 2575-3843. Science Publishing Group (18 August, 18- 2020 to present)
11. External Reviewer (*Acknowledgment*) from Asian Journal of Fisheries and Aquatic Research. Manuscripts Numbers (Ms\_AJFAR-65317) and Title : “*Development Strategy of Cultivation Seaweed Karawang District, Weat Java Province*” (*Copernicus, CNKI (China), Google Scholar, Publons, CrossRef, WorldCAT, Citefactor, ResearchGate, ACADEMIA, WorldWideScience, AGRIS, Analytical sciences digital library, Mendeley*) (26 January, 26-2021)

Makassar, 24 March 2021



Dr. Abd. Rahim, S.P., M.Si.

## Member of researcher (2)

### A. Identitas Diri

1.	Nama Lengkap (dengan gelar)	Dr. Ernawati Syahruddin Kaseng, S.Pi,M.Si
2	Jabatan Fungsional	Lektor
3.	Jabatan Struktural	Kapuslit Makanan Tradisional Gizi
4.	NIP	19711011199602 2001
5.	NIDN	0011107104
6.	Tempat dan Tanggal Lahir	Ujung Pandang 11 -10- 1971
7.	Alamat Rumah	Jln.Raya Pendidikan, Komp.UNM Blok B VI/19
9	Nomor Telepon/Faks/Hp	0411-886696/081355149683
10.	Alamat Kantor	Jln Raya Daeng tata parangtambung, Makassar
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12.	Alamat e-mail	
13.	Lulusan yang Telah Dihasilkan	S1= 30; S2=-; S3= -
14.	Mata Kuliah yang diampu	1. Biologi Laut; 2. Ekologi Perairan

### B. Riwayat Pendidikan

	S-1	S-2	S-3
Nama Perguruan Tinggi	Unhas	UI	Unhas
Bidang Ilmu	Perikanan	Biologi Konservasi	Ilmu-ilmu Pertanian
Tahun Masuk-Lulus	1989-1994	2002-2005	2008-sedang kul.
Judul Skripsi/Thesis/Disertasi	Keanekaragaman Makrozoobenthos di Tanjung Merdeka, Makassar.	Analisis vegetasi mangrove dan keanekaragaman moluska di muara sungai pancana, Kab. Barru. Sulsel	SUKSESI MANGROVE DI TONGKE SINJAI
Nama Pembimbing/Promotor	Prof.Dr.Ir.M.Natsir Nessa,M.S	Prof.Dr.Adi Basukriadi,MSc	Prof.Dr.Ir.Andi Niartiningsih,M.P.

### C. Pengalaman Penelitian Dalam 5 tahun Terakhir

No.	Tahun	Judul Penelitian	Pendanaan	Jumlah
1.	2015	Perubahan Struktur Komunitas Makrozoobentos Pada Proses Suksesi	DIKTI Fundamental	70 jt

		Ekosistem Mangrove Rehabilitasi dan Alami.	Ketua	
2.	2015	Pengembangan Sistem “Semi Closed Nutrient Cycle” untuk NPK pada Lahan Pertanian Dengan menggunakan Pupuk Urea Manusia”	DIKTI Fundamental anggota	70 jt
3.	2016	Perubahan Struktur Komunitas Makrozoobentos Pada Proses Suksesi Ekosistem Mangrove Rehabilitasi dan Alami.	DIKTI Fundamental Ketua	70 jt
4.	2016	Pembuatan Ikan Mas ( <i>Cyprinus Carpio</i> ) Pepes Bakar Bambu di Kabupaten Barru	PNBP PUSAT	Rp25. jt
5.	2017	Starategi Pengelolaan Ekosistem Mangrove dan Kajian Bioekologi : Studi Kasus Di Kecamatan Tanete Rilau Kabupaten Barru	DIKTI TERAPAN Anggota Thn I	55,3 jt
6.	2017	Keanekaragaman Jenis Moluska dan Faktor-faktor Lingkungan pada Vegetasi Mangrove di Muara Sungai Pancana Kabupaten Barru	PNBP Pasca	Rp.27. juta
7.	2018	Starategi Pengelolaan Ekosistem Mangrove dan Kajian Bioekologi : Studi Kasus Di Kecamatan Tanete Rilau Kabupaten Barru	Rencana Thn 2	
8.	2019	Pengembangan Olahan Makanan Laut di Kabupaten Barru	Risbang 2019	Rp.170 jt

#### D. Pengalaman Pengabdian Kepada Masyarakat 10 tahun Terakhir

No.	Tahun	Judul Pengabdian Kepada Masyarakat	Pendanaan	Jumlah
1.	2008	Pelatihan dan Penyuluhan Proses Pembuatan dan Pengawetan Pindang Manis Ikan Mas ( <i>Cyprinus carpio</i> ) di Kecamatan Bantimurung Kabupaten Maros (Ketua)	DP2M Dikti	Rp. 5 juta
2.	2008-2009	Pemberdayaan Masyarakat Pesisir Berbasis Pada Pengelolaan Sumberdaya Wilayah Pesisir di Kecamatan Bisappu Kabupaten Bantaeng (Suatu Upaya Peningkatan Pendapatan Masyarakat Dan Pendapatan Asli Daerah Kabu	DP2M Dikti	Rp.100 juta 2 tahun

**E. Pengalaman Penulisan artikel Ilmiah Dalam jurnal Dalam 10 tahun Terakhir**

No.	Judul Artikel Ilmiah	Volume/Nomor/tahun	Nama Jurnal
1.	Analisis Struktur dan Komposisi Moluska di Hutan Mangrove Muara Sungai Pancana,Barru.	Jurnal Bionature Volume 8 Nomor 2 Oktober 2007 ISSN 1411-4720	Jurnal Bionature
2.	Studi Komunitas Moluska di Pesisir Pantai Taraujung Kecamatan pamboang Kabupaten Majene	Jurnal Bionature/Biologi F.MIPA UNM Volume 9 nomor 1 April 2008	Jurnal Bionature
3.	Peningkatan hasil Belajar biologi Siswa Kelas IX SMP Negeri 2 Bajeng Kabupaten Gowa Melalui Pembelajaran Kooperatif Tipe STAD pada konsep pertumbuhan dan Perkembangan	Jurnal Bionature,/FMIPA UNM volume 10, Nomor 1 April 2009.	Jurnal Bionature
4.	Aplikasi teknologi Informasi dan Komunikasi (ICT) Dalam Pembelajaran	Jurnal IkhtiyarUPT UNM Edisi Khusus 21 April 2010 ISSN 1412-8535	Jurnal IkhtiyarUPT

**F. Pengalaman penyampaian Makalah secara Oral pada Pertemuan/ Seminar Ilmiah**

No.	Nama pertemuan ilmiah/Seminar	Judul Artikel Ilmiah	Waktu dan Tempat
1.	Seminar Nasional	Kuliner Tradisional Untuk Membangun Karakter Bangsa	UNM/2010
2.	Seminar internasional	Health Promoting Settings : Concepts Methodology And Practices	Griffith University/2010
3.	Seminar Nasional	Seminar Nasional Membangun Kemandirian Bangsa Melalui Pendidikan Karakter yang Berwawasan Entrepreneurship	Universitas Negeri Makassar
4.	Seminar Nasional	Hasil Program Penerapan Ipteks Kepada Masyarakat dan Industri Rumah Tangga di Perguruan Tinggi	DP2M DIKTI

5.	Konfrensi dan Seminar	Badan Kerjasama Pusat Studi lingkungan(BKPSL) Indonesia dan Pusat Penelitian Lingkungan Hidup Universitas Riau (PSLH) Indonesia XX	DP2M DIKTI
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#### G. Penghargaan yang pernah diraih dalam 10 Tahun Terakhir

No.	Jenis penghargaan	Institusi Pemberi Penghargaan	Tahun
1.	Piagam Penghargaan sebagai Pengabdi Masyarakat Terbaik III	Departemen Pendidikan Nasional Universitas Negeri Makassar Lembaga Pengabdian Kepada Masyarakat.	2008
2.	Piagam Penghargaan sebagai Pengabdi Masyarakat Terbaik II	Departemen Pendidikan Nasional Universitas Negeri Makassar Lembaga Pengabdian Kepada Masyarakat.	2019

Makassar, 24 March 2021

Dr. Ernawati Syahruddin Kaseng, S.Pi., M.Si.

## **International Partner**

### **JOHN M. LYNHAM**

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#### **Current Academic Positions:**

2018-present	Professor, Department of Economics, University of Hawai‘i at Mānoa
2019-present	Undergraduate Chair, Department of Economics, University of Hawai‘i at Mānoa
2014-present	Director, Graduate Ocean Policy Certificate program, University of Hawai‘i at Mānoa

#### **Current & Previous Editorial Positions:**

2017-2020	Editorial Board, Marine Policy
2013-present	Editorial Board, Journal of Environmental Economics & Management

#### **Previous Academic Positions:**

Spring 2016	Visiting Professor, Udayana University, Indonesia
Fall 2015	Resident Director, UH Mānoa Study Abroad Program, IÉSEG School of Management, Paris
2014-2018	Associate Professor, Department of Economics, University of Hawai‘i at Mānoa
Spring 2013	Lorry I. Lokey Business Wire Visiting Professor, Program in Human Biology and Department of Economics, Stanford University
2011-2014	Assistant Professor, Department of Economics, University of Hawai‘i at Mānoa
Spring 2011	Visiting Assistant Professor, Department of Economics, Stanford University

2008-2010 Assistant Professor, Department of Economics, University of Hawai‘i at Mānoa

**Affiliations and Non-Academic Positions:**

2018-present	Fellow, Environmental Market Solutions Lab (emLab), University of California Santa Barbara
2017-present	Advisory Committee, Conservation Strategy Fund
2016- present	Reserve List of Scientists, Scientific, Technical and Economic Committee for Fisheries (STECF), European Commission
2013-present	Affiliated Researcher, Center for Ocean Solutions, Stanford University
2011-2012	Pacific Century Fellow
2010-2011	Board of Directors, Hawaii Economic Association
2010-present	Marine Spatial Planning Working Group, Western Pacific Regional Fishery Management Council
2009-present	Collaborator, Sustainable Fisheries Group, University of California Santa Barbara
2009-present	Research Fellow, The Economic Research Organization at the University of Hawai‘i (UHERO)
2008-2014	Faculty, Graduate Ocean Policy Certificate program, University of Hawai‘i at Mānoa

**Education:**

B.A., Economics, Trinity College, University of Dublin, First Class Honours, 2003  
M.A., Economics, University of California Santa Barbara, 2005  
M.A., Ecology, Evolution and Marine Biology, University of California Santa Barbara, 2008  
Ph.D., Economics, University of California Santa Barbara, 2008 NSF/IGERT Economics and Environmental Science Training Program

**Publications:**

33. Brucal, A., & Lynham J. (forthcoming). Coastal armoring and sinking property values: the case of seawalls in California, *Environmental Economics and Policy Studies*.
32. Burgess, M., et al. (forthcoming). Opportunities for agent-based modelling in human dimensions of fisheries, *Fish and Fisheries*.
31. Abatayo, A. L., & Lynham J. (forthcoming). Risk preferences after a typhoon: An artefactual field experiment with fishers in the Philippines, *Journal of Economic Psychology*.

30. Ekawaty, R., Lynham, J., & Mous, P. (2020). Can demand-side management replicate a size limit in a small-scale fishery?, *Fisheries Research*, 223, 105436.
29. Lynham, J., Nikolaev, A., Raynor, J., Vilela, T., & Villaseñor-Derbez, J.C. (2020). Impact of two of the world's largest protected areas on longline fishery catch rates, *Nature Communications*, 11, 979.
28. Villaseñor-Derbez, J.C., Lynham, J., & Costello, C. (2020). Environmental Market Design for Large-Scale Marine Conservation, *Nature Sustainability*, 3, 234–240.
27. Halliday, T., Lynham, J., & de Paula, Á. (2019). Vog: Using Volcanic Eruptions to Estimate the Health Costs of Particulates, *Economic Journal*, 129(620), 1782-1816.
26. Mora, C., Spirandelli, D., Franklin, E.C., Lynham, J., ... & Hunter, C. (2018). Broad threat to humanity from cumulative climate hazards intensified by greenhouse gas emissions, *Nature Climate Change*, 8, 1062–1071.
25. Cabral, R. B., Gaines, S. D., Mayorga, J., Clemence, M., Lynham, J., Koeshendrajana, S., ... & Zulbainarni, N. (2018). Reply to 'Achieving sustainable and equitable fisheries requires nuanced policies not silver bullets'. *Nature Ecology & Evolution*, 2(9), 1335.
24. Leibbrandt, A., & Lynham, J. (2018). Does the paradox of plenty exist? Experimental evidence on the curse of resource abundance. *Experimental Economics*, 21(2), 337-354.
23. Leibbrandt, A., & Lynham, J. (2018). Does the allocation of property rights matter in the commons?. *Journal of Environmental Economics and Management*, 89, 201-217.
22. Cabral, R. B., Mayorga, J., Clemence, M., Lynham, J., Koeshendrajana, S., Muawanah, U., ... & Gaines, S. D. (2018). Rapid and lasting gains from solving illegal fishing. *Nature Ecology & Evolution*, 2(4), 650-658.
21. Abatayo, A. L., Lynham, J., & Sherstyuk, K. (2018). Facebook-to-Facebook: online communication and economic cooperation. *Applied Economics Letters*, 25(11), 762-767.
20. Lynham, J. (2017). Identifying Peer Effects Using Gold Rushers. *Land Economics*, 93(3), 527- 548.
19. Lynham, J., Noy, I., & Page, J. (2017). The 1960 tsunami in Hawaii: long-term consequences of a coastal disaster. *World Development*, 94, 106-118.
18. Lynham, J., Halpern, B. S., Blenckner, T., Essington, T., Estes, J., Hunsicker, M., ... & Stier, A. (2017). Costly stakeholder participation creates inertia in marine ecosystems. *Marine Policy*, 76, 122-129.
17. Barnes, M. L., Lynham, J., Kalberg, K., & Leung, P. (2016). Social networks and environmental outcomes. *Proceedings of the National Academy of Sciences*, 113(23), 6466-6471.
16. Abatayo, A. L., & Lynham, J. (2016). Endogenous vs. exogenous regulations in the commons. *Journal of Environmental Economics and Management*, 76, 51-66.

15. Lynham, J., Nitta, K., Saijo, T., & Tarui, N. (2016). Why does real-time information reduce energy consumption?. *Energy Economics*, 54, 173-181.
14. Jang, C., & Lynham, J. (2015). Where do social preferences come from?. *Economics Letters*, 137, 25-28.
13. Selkoe, K. A., Blenckner, T., Caldwell, M. R., Crowder, L. B., Erickson, A. L., Essington, T. E., ... & Kappel, C. V. (2015). Principles for managing marine ecosystems prone to tipping points. *Ecosystem Health and Sustainability*, 1(5), 1-18.
12. Barnes-Mauthe, M., Gray, S. A., Arita, S., Lynham, J., & Leung, P. (2015). What determines social capital in a social–ecological system? Insights from a network perspective. *Environmental Management*, 55(2), 392-410.
11. Lynham, J., & Tarui, N. (2014). Real-time information and consumption: what can water demand programs learn from electricity demand programs?. In *Routledge Handbook of Water Economics and Institutions* (pp. 217-233). Routledge.
10. Lynham, J. (2014). Book Review: *Economics of the Oceans: Rights, Rents and Resources*, *Applied Economics Journal*, 21(2), 1-4.
9. Lynham, J. (2014). How have catch shares been allocated?. *Marine Policy*, 44, 42-48.
8. Fujita, R., Lynham, J., Micheli, F., Feinberg, P. G., Bourillón, L., Sáenz-Arroyo, A., & Markham, A. C. (2013). Ecomarkets for conservation and sustainable development in the coastal zone. *Biological Reviews*, 88(2), 273-286.
7. J. Lynham and I. Noy (2013), “Disaster in Paradise: A Preliminary Investigation of the Economic and Social Aftermaths of the Hilo Tsunami of 1960 and Hurricane Iniki of 1992”, in K. Pfeifer and N. Pfeifer (Eds.), *Forces of Nature and Cultural Responses*, 93-108, Springer.
6. N. Burger, G. Charness and J. Lynham (2011), “Field and Online Experiments on SelfControl”, *Journal of Economic Behavior & Organization*, 77(3), 393-404.
5. M. Smith, J. Lynham, J. Sanchirico and J. Wilson (2010), “The political economy of marine reserves: Understanding the role of opportunity costs,” *Proceedings of the National Academy of Sciences*, 107(43), 18300-18305.
4. C. Costello, J. Lynham, S. Gaines and S. Lester (2010), “Economic Incentives and Global Fisheries Sustainability,” *Annual Review of Resource Economics*, 2, 229-318.
3. N. Burger and J. Lynham (2010), “Betting on Weight Loss and Losing: Personal Gambles as Commitment Mechanisms,” *Applied Economics Letters*, 17(12), 1161-1166.
2. J. Lynham, C. Costello, S. Gaines, R.Q. Grafton and J. Prince (2009), “Diverse Fisheries Require Diverse Solutions: Response,” *Science*, 323, 338-339.
1. C. Costello, S. Gaines and J. Lynham (2008), “Can Catch Shares Prevent Fisheries Collapse?” *Science*, 321, 1678-1681.

## **Working Papers:**

“Avoiding Tipping Points Through Effective Monitoring” (with Adrian C. Stier, Timothy E. Essington, Jameal F. Samhouri, Benjamin S. Halpern, Crow White, Anne K. Salomon, and Phillip S. Levin) resubmission requested, Proceedings of the Royal Society B.

“Stress and Temporal Discounting: Do Domains Matter?” (with Johannes Haushofer, Chaning Jang and Justin Abraham).

“Online Segregation” (with Philip Neary). “When is equity the enemy of conservation prioritization?” (with Klein, Carissa; Adams, Vanessa; Brown, Christopher; Chauvenet, Alienor; Davis, Katrina; Game, Edward; Halpern, Benjamin; Mappin, Bonnie; Selkoe, Kimberly; Watson, James; Possingham, Hugh).

“Income Targeting and the Evolution of a Fishery” (with David Siegel).

“Size-Structure Induced Hysteresis in a Fishing Reserve Model” (with Roger Nisbet and Steven Gaines).

## **Awards**

### **Research:**

- Selected for Faculty of 1,000 “Ecology” (2008 and 2010)
- “Can Catch Shares Prevent Fisheries Collapse?” selected by the editors of Nature as one of the “Research Highlights of 2008”
- Honorable Mention, Best Student Paper Award, International Institute of Fisheries Economics and Trade 14th Biennial Conference, 2008
- Honorable Mention, OECD Prize for Best Policy Paper, International Institute of Fisheries Economics and Trade 14th Biennial Conference, 2008
- Departmental Distinguished Research Paper Award, UCSB, 2006

### **Teaching:**

- Board of Regents’ Medal for Excellence in Teaching, University of Hawai‘i System, 2013
- Department of Economics Outstanding TA Award, UCSB, 2005
- Office of Residential Life Outstanding TA Award, UCSB, 2005
- Office of Residential Life Outstanding TA Award, UCSB, 2004

## **Teaching Experience:**

### **Courses Taught**

- Spring 2019, Instructor, Department of Economics, *UH-Mānoa*. “Introductory Econometrics” [Undergraduate], “Principles of Microeconomics” [Undergraduate].
- Fall 2018, Instructor, Department of Economics, *UH-Mānoa*, “Introductory Econometrics” [Undergraduate], “The Ocean Economy” [Undergraduate], “Marine Resource Economics” [Graduate]

- Spring 2018 Instructor, Department of Economics, *UH-Mānoa*, “Introductory Econometrics” [Undergraduate], “Resource Economics” [Graduate]
- Fall 2017, Instructor, Department of Economics, *UH-Mānoa*, “The Ocean Economy” [Undergraduate], “Marine Resource Economics” [Graduate], “Principles of Microeconomics” [Undergraduate]
- Spring 2017, Instructor, Department of Economics, *UH-Mānoa*, “Introductory Econometrics” [Undergraduate], “Principles of Microeconomics” [Undergraduate]
- Fall 2016, Instructor, Department of Economics, *UH-Mānoa*, “The Ocean Economy” [Undergraduate]
- Fall 2015, Instructor, *IESEG School of Management*, “Principles of Microeconomics” [Undergraduate], “Environmental Economics” [Undergraduate]
- Spring 2015, Instructor, Department of Economics, *UH-Mānoa*, “Principles of Microeconomics” [Undergraduate], “Principles of Microeconomics” [Undergraduate]
- Fall 2014 Instructor, Department of Economics, *UH-Mānoa* “The Ocean Economy” [Undergraduate]
- Summer 2014 Instructor, Outreach College, *UH-Mānoa* “Science In Action: Marine Resource Economics” [High School]
- Spring 2014 Instructor, Department of Economics, *UH-Mānoa* “Resource Economics” [Graduate] “Principles of Microeconomics” [Undergraduate]
- Fall 2013 Instructor, Department of Economics, *UH-Mānoa* “Principles of Microeconomics” [Undergraduate] “Principles of Microeconomics” [Undergraduate]
- Spring 2013 Instructor, Earth Systems/Human Biology/Economics, *Stanford University* “Marine Resource Economics and Conservation” [Undergraduate]
- Winter 2013 Instructor, Department of Economics, *Stanford University* “Environmental Economics and Policy” [Undergraduate]
- Fall 2012 Instructor, Department of Economics, *UH-Mānoa* “Principles of Microeconomics (Honors)” [Undergraduate] “The Ocean Economy” [Undergraduate]
- Spring 2012 Instructor, Department of Economics, *UH-Mānoa* “Principles of Microeconomics” [Undergraduate]
- Fall 2011 Instructor, Department of Economics, *UH-Mānoa* “Principles of Microeconomics (Honors)” [Undergraduate] “The Ocean Economy” [Undergraduate]
- Spring 2011 Instructor, Earth Systems/Economics, *Stanford University* “Marine Resource Economics and Policy” [Undergraduate]
- Winter 2011 Instructor, Department of Economics, *Stanford University* “Environmental Economics and Policy” [Undergraduate]
- Fall 2010 Instructor, Department of Economics, *UH-Mānoa* “The Ocean Economy” [Undergraduate]
- Fall 2009 Instructor, Department of Economics, *UH-Mānoa* “Principles of Microeconomics (Honors)” [Undergraduate] “Marine Resource Economics” [Graduate]
- Spring 2009 Instructor, Department of Economics, *UH-Mānoa* “Principles of Microeconomics” [Undergraduate] Instructor, School of Ocean and Earth Science and Technology/College of Social Sciences, *UH-Mānoa* “Ocean Policy and Management” [Graduate]
- Fall 2008: Instructor, Department of Economics, *UH-Mānoa* “Principles of Microeconomics” [Undergraduate]

- Summer 2005: Instructor, Department of Economics, UCSB “Principles of Microeconomics” [Undergraduate]
- Fall 2003-Spring 2005: Teaching Assistant, Department of Economics, UCSB “Intermediate Macroeconomic Theory”, “Experiments with Economic Principles”, “Principles of Microeconomics” [All Undergraduate]

*Guest Lectures*

2019: “Ocean Economics” [Graduate], NOAA short course, NOAA Pacific Islands Office “Natural Resource Economics” [Graduate], *Conservation Strategy Fund* short course, Humboldt State University

2018: “Natural Resource Economics” [Graduate], *Conservation Strategy Fund* short course, UC Berkeley “Fisheries Economics & Policy” [Graduate], *Conservation Strategy Fund* short course, Indonesia

2017: “Natural Resource Economics” [Graduate], *Conservation Strategy Fund* short course, UC Berkeley

2016: “Field Experiments” [Graduate], PhD Course: Field Experiments, *University of Copenhagen*, “Natural Resource Economics” [Graduate], *Conservation Strategy Fund* short course, UC Berkeley “Fisheries Economics & Policy” [Graduate], *Conservation Strategy Fund* short course, Indonesia

2015: “Natural Resource Economics” [Graduate], *Conservation Strategy Fund* short course, Stanford University “Fisheries Economics & Policy” [Graduate], *Conservation Strategy Fund* short course, Indonesia

2014: “A Fish Tale”, [Undergraduate], Honors Program, *UH-Mānoa* “Environmental Economics” [Undergraduate], Department of Economics, *UH-Mānoa* “Property Rights and Social Norms” [Graduate], *Latin American Fisheries Fellowship* short course, La Paz, Mexico

2013: “Hot Topics on Major Federal Environmental Statutory Schemes” [Graduate], Law School, *Stanford University*, “Social Studies for Teachers: Thinking Historically in the Classroom” (3 Lectures) [Graduate], College of Social Sciences, *UH-Mānoa*, “Introduction to Research and Creative Work at Manoa” [Undergraduate], Honors Program, *UH-Mānoa*, “Environmental Economics” (3 Lectures) [Graduate], Department of Economics, *Stanford University*, “Designing and Scaling Policy and Business Practices for Global Greentech”, [Undergraduate], Public Policy, *Stanford University*

2012: “First Nations’ Futures Program”, *Kamehameha Schools* “Topics in Conservation Biology” [Graduate], Department of Zoology, *UH-Mānoa*, “Meiji Gakuin University Field Study” [Undergraduate], Department of Economics, *UH-Mānoa*

2011: “Research Seminar in Conservation” [Graduate], Department of Geography, *UH-Mānoa* “Social Studies for Teachers: Thinking Historically in the Classroom” [Graduate], College of Social Sciences, *UH-Mānoa*, “Meiji Gakuin University Field Study” [Undergraduate], Department of Economics, *UH-Mānoa* “Environmental Economics” [Undergraduate], Department of Economics, *UH-Mānoa*

2010: “Meiji Gakuin University Field Study” [Undergraduate], Department of Economics, *UH-Mānoa*, “Principles of Microeconomics” [Undergraduate], Department of Economics, *UH-Mānoa*

*Mānoa*, “Fisheries Science” [Undergraduate], Department of Zoology, *UHMānoa*, “Intermediate Microeconomics” [Undergraduate], Department of Economics, *UH-Mānoa*, “UH @ SEA” (2 Lectures) [Undergraduate], College of Social Sciences, *UH-Mānoa*, “Strategic Behavior and Experimental Economics” [Graduate], Department of Economics, *UH-Mānoa*

### **Professional Activities:**

Grants (\$1,874,288):

- “Diversifying Fisheries Investment for the PNA”, 2019, Subcontract from The Nature Conservancy through UCSB, (\$17,515)
- %“Benefits of Fisheries Sustainability in Indonesia: Collaborative Modeling to Inform Strategic Institutional and Policy Reform in Indonesia”, 2016, Subcontract from Packard Foundation through UCSB, (\$31,044)
- “Do seawalls lower property values?”, University of Hawaii Sea Grant College Program, 2016, (\$72,216), Principal Investigator
- “Social-ecological complexity and adaptation in marine systems”, National Science Foundation, 2012, (\$1,498,903), Co-PI, Other PIs: Simon Levin (Princeton), Iain Couzin (Princeton)
- “Facebook-to-Facebook: Online Communication and Economic Cooperation”, University Research Council, 2012, (\$20,000), Principal Investigator, Other PI: Katya Sherstyuk (University of Hawai‘i)
- “Forage Fish and Food Webs”, Subaward from Waitt Foundation through Sustainable Fisheries Group, 2012, (\$21,044), Principal Investigator
- “Developing a new research collaboration in the Pacific: Hawaii-Fiji workshop on social-ecological resiliency to climate change, preliminary data collection, and methods training”, National Science Foundation, 2012, (\$47,148), Co-PI, Other PIs: Tamara Ticktin, Alan Friedlander, Tom Giambelluca (all University of Hawai‘i)
- “The Economic Consequences of Coastal Disasters”, University of Hawaii Sea Grant College Program, 2012, (\$53,418), Principal Investigator, Other PI: Ilan Noy (University of Hawai‘i)
- “MSA Implementation: Strategic Planning for Administering Catch Share Program in the Western Pacific Region”, NOAA, (\$80,000), 2009-2010, Principal Investigator
- “Exploring Socio-economic and Ecological Dimensions of Catch Shares”, Subaward from Paul G. Allen Family Foundation through Sustainable Fisheries Group, (\$30,000), 2009, Principal Investigator
- “Incentive Structures and Procrastination”, Russell Sage Foundation, 2007-2008, (\$2,500), Principal Investigator
- “Responsibility Alleviation Effects in the Commons”, UCSB Economics Department Research Grant, 2006, (\$500), Principal Investigator\

Referee reports:

Agricultural and Resource Economics Review, Agricultural Economics, American Journal of Agricultural Economics [3], Aquatic Living Resources, Asian Fisheries Science, Biodiversitas, California Sea Grant, Canadian Journal of Fisheries and Aquatic Sciences [4], Climatic Change, Conservation Biology [2], Conservation Letters, Ecological Economics [4], Ecology and Society, Ecology Letters, Economica, Energy Economics [3], Environment

and Development Economics, Environmental and Resource Economics [6], Environmental Conservation, Experimental Economics, Fish and Fisheries, Games, Games and Economic Behavior, German Federal Ministry of Education and Research, Handbook of Water Economics and Institutions, ICES Journal of Marine Science, Journal of Economic Behavior & Organization [4], Journal of Economic Psychology, Journal of Environmental Economics and Management [12], Journal of Public Economics [2], Journal of the Association of Environmental and Resource Economists [2], Land Economics [6], Management Science [4], Marine Policy [8], Marine Resource Economics [2], Netherlands Organisation for Scientific Research, NOAA Saltonstall-Kennedy Competitive Research Program, North Pacific Research Board, Proceedings of the National Academy of Sciences [2], Review of Environmental Economics and Policy, Rhode Island Sea Grant, Routledge, Scandinavian Journal of Economics, Washington Sea Grant.

Total: 83

Seminars:

UC Davis (2019), The Economic and Social Research Institute (2018), University of Indonesia (2016), WWF Indonesia (2016), Udayana University (2016), University of Alaska (2015), Geography Department, University of Hawai‘i (2015), Boston University (2014), Hong Kong University of Science & Technology (2014), World Bank (2014), University of Connecticut (2014), Stanford Environmental and Energy Policy Analysis Center – Stanford University (2013), UC Berkeley (2013), Monash University (2012), University of Wyoming (2012), Stanford Environmental and Energy Policy Analysis Center – Stanford University (2011), University of Hawai‘i - Department of Natural Resources and Environmental Management (2010), UC Santa Barbara (2009), Pacific Islands Fisheries Science Center (2008), University of New South Wales (2008), Monash University (2008), UC Berkeley (2008), University of Maryland (2008), Resources for the Future (2008), University of Hawai‘i at Mānoa (2008)

Conference Presentations:

International Conference on Sustainability Science and Management (Keynote Speaker, 2019), Science for Nature and People Partnership (2017), North American Meeting of the Economic Science Association (2016), North American Meeting of the Economic Science Association (2014), Ocean Tipping Points Scientific Working Group (2014), Allied Social Science Association (ASSA) Conference (2014), Ocean Tipping Points Scientific Working Group (2013), Occasional California Workshop in Environmental and Resource Economics (2013), Pacific Conference of The Regional Science Association International (2013), Bay Area Behavioral and Experimental Economics Workshop (2013), Pacific Conference for Economic Development (2013), North American Meeting of the Economic Science Association (2012), “Lessons Learned in Rights-Based Fisheries Management” Workshop (2011), North American Association of Fisheries Economists (2011), North American Meeting of the Economic Science Association (2010), Occasional California Workshop in Environmental and Resource Economics (2010), American Association for the Advancement of Science (AAAS) Annual Meeting (2010), Las Cuotas de Captura: Análisis de la Experiencia Peruana (2009), International Meeting of the Economic Science Association (2009), Workshop on Analytic Innovations in Minimum Information Fisheries

Management (2009), International Marine Conservation Congress (2009), North American Association of Fisheries Economists (2009), Southwest Alaska Municipal Conference (2009), International Institute of Fisheries Economics and Trade 14th Biennial Conference (2008), NBER Summer Institute on Environmental Economics (2007), CU Environmental and Resource Economics Workshop (2007), American Fisheries Society Annual Meeting (2007), Growth of Gambling and Prediction Markets Conference (2007), Occasional California Workshop in Environmental and Resource Economics (2006), American Agricultural Economics Association Annual Meeting (2006), World Congress of Environmental and Resource Economics (2006)

**Organizational:**

- College of Social Sciences Teaching Awards Committee, 2018
- Scientific Committee Member, 2nd International Conference on Indonesian Economy and Development 2017
- Organizing Committee, International Economic Science Association Conference 2014
- Organizing Committee, 15th South West Economic Theory Conference 2013
- Campus-wide Search Committee, Sustainability Cluster Hire, University of Hawai‘i at Mānoa
- Scientific Committee, North American Association of Fisheries Economists 2011 Conference

**Advising:**

Postdoctoral Researchers: Arlan Brucal (*First Appointment: London School of Economics*) Completed (Chair/Co-Chairof PhD committee): Chaning Jang (*First Appointment: Princeton University*), Anna Abatayo (*First Appointment: University of Copenhagen*)

Completed (PhD committee member, MA or UG thesis):

Anna Butchart (PhD, Political Science), Zack Oyafuso (PhD, Marine Biology), Pathomwat Chantarasp (PhD, Economics, First Appointment: Prince of Songkla University), Kanae Tokunaga (PhD, Economics, First Appointment: University of Tokyo), Michele BarnesMauthe (PhD, Natural Resources and Environmental Management), Kohei Nitta (PhD, Economics, First Appointment: University of Erlangen-Nuremberg), Faith Knighton (MA, Geography), Veasna Kum (PhD, Natural Resources and Environmental Management), Elyse Oyama (Undergraduate Honors Thesis), Sean D'Evelyn (PhD, Economics, First Appointment: Loyola Marymount University), Maria Plottier (MA, Urban and Regional Planning), Chloe Salle (Undergraduate Marine Option Program), Lora Reeve (Graduate Ocean Policy Certificate)

**Financial Support Provided for Graduate Students:**

Research Assistants:

Sarah Medoff (2018- ), Mel Lorenzo Accad (2017-2018), Jonathan Page (2012-2014), Jonathan Sweeney (2014), Channing Jang (2012-2014), Anna Abatayo (2013-2015), Kohei Nitta (2012-2013)

Research/Conference Travel:

Rachel Dacks (2012), Katie Kamelamela (2012), Eric Tong (2012), Emerson Odongo (2012), Damian Sailors (2012), Chaning Jang (2012-2014), Anna Abatayo (2014-2015), Kohei Nitta (2014), Michele Barnes (2014-2015)

**Publications in the Popular Press:**

“The Tragedy of the ‘Con”, The Surfer’s Path, *61*, July/August 2007, 130.

“Catch Shares”, Food Ethics, *4(1)*, Spring 2009, 32-33.

“Measuring the health impact of airborne particulates”, VoxEU, 22 June 2015.

**Languages (in descending order of fluency):**

English, French, Indonesian, Irish

## National Partner

### Personal Information

1. Name : Dr. Ir. Abd. Rasyid J., M.Si.
2. Place & Date of Birth : Makassar, 3 March 1965
3. Gender : Male
4. Address : Jl. Lasuloro Raya No. 119 Perumnas Antang
5. Pangkat / golongan : Pembina / IV c
6. N I P (Employee Number) : 19650303 199103 1 004
7. Working Unit : Fak. Ilmu Kelautan dan Perikanan Unhas
8. Office Address : Jl. Perintis Kemerdekaan Km. 10, Tamalanrea,  
Makassar
9. Email : fayufi@yahoo.com

### Educational Background

- Primary School / Year : SD. Muhammadyah Makassar/ 1979
- Junior High School/Year : SMP Negeri VI Makassar / 1982
- Senior High School/Year : SMA Negeri I Makassar / 1985
- S1 (Bachelor Degree) : Universitas Hasanuddin/1990
- S2 (Post-Graduated Program) : IPB / 1996
- S3 (Doctoral Program) : UNHAS/2011

### Carrier Experiences

- 1990 (1 Month) PT. Perken Kendari Sulawesi Tenggara (Southeast Sulawesi)
- 1990 - 1991 PT. Mitra Kartika Sejati (Deputy Head of Factory)
- 1991 - Now Academic Staff of Hasanuddin University
- 1999 – 2001 Secretary of P2KKN Hasanuddin University (UNHAS)
- Since January 2002 – 2010 Deputy Dean for Student Affairs (WD III) FIKP UNHAS
- Since January 2011 – Now Instructor on PMW (Program Mahasiswa Wirausaha) Program at UNHAS (122/H4/O/2011)
- Since March 2011 – 2014 Special Staff to The Chancellot for Stuednt and Alumni Affairs (1122/H4/P/2011)
- Since July 2014 – Now Head of Job Placement Centre UNHAS

- Inaugurated on 22 Januari 2015 - 19 Juli 2018 Vice Chancellor for Student and Alumni Affairs (WR III) UNHAS
- Inaugurated on 19 July 2018 – Now Secretatry of LP2M UNHAS

### **Research Experiences**

- Aspek Kelayakan Budidaya Berbagai Jenis Rumput Laut di Perairan Sulawesi Selatan. Stranas 2009 di perairan Sulawesi Barat dengan pendekatan Knowledge-Based model (As cordinator of the Expert Team) Oktober-Desember on 2011
- Valuasi nilai kerusakan ekosistem di Selat Makassar (Rijal Idrus), Oktober-Desember on 2011
- Penentuan wilayah Fishing Ground ikan pelagis kecil dan besar Provinsi Sul-Bar On 2011 (as researchers cordinator)
- Dinamika Massa Air Laut Hubungannya Dengan Daerah Penangkapan Ikan Pelagis di Perairan Kota Makassar (Performance Research). On 2012
- Laju infeksi dan kemampuan invasi penyakit Brown Band (BrB) terhadap beberapa karang bercabang di Pulau Barrang Lompo (BOPTN Research, as a member of Mrs. Dr. Ir. Arniati) on 2013
- Pemetaan Zona Potensial Penangkapan Ikan Tongkol Terkait Kondisi Oseanografi Untuk Mendukung Pengembangan Usaha Perikanan Tangkap Skala Kecil di Perairan Spermonde dan teluk Bone, Sulawesi Selatan, 2013 (MP3EI).
- Pemetaan Zona Potensial Penangkapan Ikan Tongkol Terkait Kondisi Oseanografi Untuk Mendukung Pengembangan Usaha Perikanan Tangkap Skala Kecil di Perairan Spermonde dan teluk Bone, Sulawesi Selatan, 2014 (MP3EI).
- Studi Penataan Kawasan Pesisir Pulau Wangi-Wangi. Kerjasama Satker Perangkat Daerah bagian Pembangunan Kabupaten Wakatobi. A Collaboration with The Working Unit ot Regional Apparatus, Development Part in Wakatobi. On 2014
- Zonasi Daerah Penangkapan Ikan Pelagis di Kalimantan Utara. A Collaboration with Marine and Fisheries (Dinas Kelautan dan Perikanan) in Kalimantan Utara Region. On 2015
- Model Pengelolaan Mangrove Berbasis Spasial Melalui Pendekatan Kondisi Oseanografi di Teluk Bone dan Kepulauan Spermonde, Sulawesi Selatan. Unggulan Perguruan Tinggi. On 2016. (Support by Ministry)

- Model Pengelolaan Mangrove Berbasis Spasial Melalui Pendekatan Kondisi Oseanografi di Teluk Bone dan Kepulauan Spermonde, Sulawesi Selatan. Unggulan Perguruan Tinggi. On 2017. (Support by Ministry)
- Model Pengelolaan Mangrove Berbasis Spasial Melalui Pendekatan Kondisi Oseanografi di Laut Flores. BSMI on 2018. Support by UNHAS
- Analisa Komparasi Kondisi Fisika Kimia Perairan Spermonde Kabupaten Pangkep dengan Lahan Budidaya Rumput Laut di Provinsi Sulawesi Selatan 2019 – 2022
- Identifikasi Daerah Upwelling Musim barat untuk Menunjang Keberlanjutan Produktivitas Perikanan di Perairan Indoenesia, on 2020. Collaboration Research between UNHAS, UNDIP and UB (ongoing research)
- Program Kemitraan Wilayah (PKW) Desa Bulu Cindea kecamatan Bungoro Kabupaten Pangkep. On 2019- 2021. National Dedication.

### **Scientific Paper Publications**

- Impact of human interventions on mangrove ecosystem in spatial perspective. IOP Conference Series: Earth and Environmental Science 47 (1), 012041(Scopus). On 2016
- Keterlibatan Pemuda dalam Perkembangan Penyakit Sosial.J. Analisis, Desember 2017. Vol. 6 No. 2: 119 – 124
- Peran Pemuda dalam Pembangunan Kota Makassar Berbasis Lorong, Buku 20 On reformasi Indonesia dalam perspektif Sosiologi (1998-2018) ISBN 978-602-71987-2-2. On 2017
- Fenomena Distribusi Zooplankton di Perairan Laut Makassar. Jurnal Pengelolaan Perairan. Vol 1 (2): 1- 9. Oktober 2018. e-ISSN: 2620-6552. Rahmadi Tambaru, Abdul Rasyid, Faturahman

Makassar, March 2021

Dr. Ir. Abd. Rasyid Jalil., M.Si.  
NIP. 19650303 199103 1 004