

## Economic Impact Analysis of Marine Tourism to Community Revenue

<sup>1,2</sup>Sri Fitriani Monoarfa, <sup>2</sup> Sri Nuryatin Hamzah, dan <sup>2</sup> Lis M Yapanto

<sup>1</sup> ririmonarfa@gmail.com

<sup>2</sup>Department of Aquatic Resources Management, Faculty of Fisheries and Marine Sciences,  
State University of Gorontalo

### Abstract

This study aims to determine the economic impact on the income of nautical tourism village community Olele District of Kabila Bone Bone Bolango District. This research was conducted in July-November 2015. The respondents rating determined non-probability sampling, are selected by convenience sampling method. Researchers chose rating arbitrary or accidental encounter. The data collection was done by direct observation using questionnaires. The economic impact was analyzed by using Keynesian Income Multiplier. The results showed that the impact on revenues of maritime tourism Olele village communities are in the category of low and have not been felt evenly. Income Keynesian Multiplier value is 0.99, Type 1 Income Multiplier Ratio is 1.21 and Type 2 Income Multiplier Ratio is 1.67. Direct economic impact in the form of income owners of business units that is equal to 66.27%. While the indirect impact in the form of labor income is still very low at 2.81%. Further impact in the form of labor expenditures amounted to 48.76% is used for food.

Keywords: Marine tourism; Keynesian Income Multiplier; economic impact

### Introduction

Tourism is an integral part of human life, especially regarding the social and economic activities. As we know that the tourism sector in Indonesia is still a very important role in supporting national development as well as one of the factors that are very strategic to increase people's income and foreign exchange. In addition, the presence of the nation will be more familiar tourism, culture, customs and also can enjoy the natural beauty.

The positive effects resulting from the development of the tourism sector among others, can reduce unemployment and create jobs for the community around these attractions. The development of the tourism sector could also create jobs in other related sectors, and can increase income and standard of living. In addition, other positive effects on the tourism sector is able to increase foreign exchange reserves of a country (Yoeti 2008 in Nurfiana, 2013).

Coral reefs have so many benefits. Reefs may be the source of fish and other seafood containing high protein sources. Coral reefs are protecting cap from waves and currents. In addition, the helpful coral

reefs as a natural laboratory for education and research. In the travel services of coral reefs have important benefits as a wealth of tourism highly selling for diving and snorkeling.

Olele village located in the district of Bone Bolango with the condition of coral reefs is still quite good and varied. Based Bone Bolango Regent Decree No. 165 In 2006, the Village Olele waters designated as Marine Conservation Area as an area for the utilization of natural resources for the benefit of recreation, tourism, education, and other forms that do not conflict with the principles of conservation. Geographically, KKLD Olele village located at the position 0024'51 " - 0024'23" N and 123008'59 " - 123009'11" BT, has a total area of about 24 910 ha.

Olele village became one of the marine tourism destination in the province of Gorontalo. Famous marine tourism potential in this area is Olele Marine Park which is located about 25 km from the city of Gorontalo. The development of nautical tourism in Marine Park Olele still many opportunities, especially for snorkeling and diving (diving). This is certainly the influence and role in increasing income of coastal communities and regions. With the tourists who come

each time will encourage local communities to engage in business activities.

Potential for marine tourism in Marine Park Olele contain economic values that affect the welfare of the community. Therefore, you need to know and do research on the analysis of the economic impact on the income of nautical tourism in the village community Olele Bone Bolango District. This research is expected to help the local community to be more aware of the importance of these tourist sites for improving the economy of the local community and encourage people to participate in protecting the tourist area.

### Research Methodology

The study was conducted from July 2015- November 2015 in the village of the District Olele Kabila Bone, Bone Bolango District, Gorontalo province. The choice of location is done intentionally (purposive) on the basis that Olele Village is an area attraction Olele Marine Park which is currently actively developing its potential.

The data collection is done by direct observation on circumstances that occur within the study area. In scientific research, data collection is very important. The technique of data collection used in research in this study is the study of literature, interviews, questionnaires, and observation.

Respondents in this study were divided into 2 (two) groups of tourists and people who are in areas Olele Marine Parks, both the people involved and the people who are not involved. Communities involved, that communities with economic activities, such as diner owner and the owner of rental tools and services. While people who are not involved, that people who do not have jobs related to tourism activities.

The sampling method using probability sampling method is simple random sampling or sampling of respondents randomly with each element that make up the population given the same opportunity to be selected as the respondent. The methods correspond to travelers using non-probability sampling methods that all objects of research do not have an equal opportunity to be selected as the respondent (Juanda, 2007). Respondents were selected using

convenience sampling method, where researchers take samples that are easily available, serampangan or chance encounter. Respondent selection is as many as 95 people, is calculated using the formula Slovin (Sevilla 1993 in Iksan and Bilal, 2014).

The economic impact is measured by using a multiplier effect (multiplier) of the flow of money is going. According Vanhove (2005) in Dritasto (2013) In measuring the economic impact of an activity on the income of local people travel, there are two types of multipliers, namely:

- a. Local Keynesian Income Multiplier, a value that indicates how much expenditure by tourists impact on improving local livelihoods.
- b. Ratio Income Multiplier, a value that indicates how much the perceived direct impact of tourist spending impacting on the local economy. This multiplier measures the impact of indirect and second round effects (indirect).

According Dritasto (2013) the value of Keynesian Multiplier Local Income, Income Multiplier Ratio Type I, Type II Income Multiplier Ratio has the following criteria:

- a. If the values are less than or equal to zero ( $\leq 0$ ), then the tourist site has not been able to provide economic impact on tourism activities,
- b. If the values are between zero and one ( $0 < x < 1$ ), then the tourist site still has a value of low economic impact, and
- c. If the values are more than or equal to one ( $\geq 1$ ), then the tourist sites have been able to provide economic impact on tourism activities.

### Results and Discussion

#### General overview of the study site

Olele village is one of the villages in the coastal region of Tomini. The administration Village Olele included in Bolangao Bone regency, Gorontalo province. Olele village originally was one of the hamlets of the village Oluhuta and in 2004 set to be a village. Olele village is divided into four hamlets in the region, namely: Indato Dusun, Dusun Central Olele, Pentadu Hamlet, and Hamlet Hungayo Kiki. Geographically Olele village has an area of approximately 2,540 hectares.

### Characteristics of visitors

Travelers who come to the site Olele Marine Parks tend to only come at the end of the week, while on weekdays this attraction lonely traveler. Lack of information accessibility to the location of Marine Parks Traveler Olele cause is difficult to find the location of Marine Park Tourism Olele, especially for tourists who come from outside the province of Gorontalo.

Based on the results of questionnaires conducted on tourists, obtained information that most tourists who came to the Marine Parks Olele derived from Gorontalo province. Olele village famous with its underwater beauty make coming generally aim for diving and snorkeling. Travelers who traveled to the village of Olele most of which have never come to this tourist location. In general, the characteristics of tourists who visit based on the results of questionnaires to 95 respondents described as follows

#### Age Group

Age group of visitors the most are the age group of 20-30 years, ie 62%. This shows that most respondents are dominated by productive age group.

#### Place of Origin

Most tourists who come to the site of Marine Parks Olele comes from the province of Gorontalo, namely 67%. While 33% came from outside the province of Gorontalo such as Jakarta, Makassar, Manado, Yogyakarta, and Surabaya. Access information that is not clear to travel to locations Marine Park Olele leads to lack of tourists from outside the province of Gorontalo. The results of the questionnaire menunjukkan that the average tourists from outside the province of Gorontalo know the whereabouts of Marine Parks Olele through friends, relatives or coworkers.

#### Level of Education

Visitors dominated by education level Bachelor and SMA / SMK with presentations respectively 44% and 39%. As for the 11% Diploma, Masters by 5%, and 1% SMP.

#### Job

Most respondents had a job as a private employee with a presentation that is as much as 28%, followed by schoolchildren / students by 25%, 17% SOE employees, civil servants (PNS) Self as much as 10% and 9%. Other work such as housewives and honorarium workers as much as 11%.

#### Level of Income

In this study, respondents' income levels are divided into six categories. Based on the above diagram is known that the rating income of Rp. 1,000,000 and Rp. 2,500,000 were 26% and 20% above Rp. 7,000,000. Travelers who have an income of less than Rp. 1,000,000 18%. As for Rp. 2,500,000 - Rp. 4,000,000 19%, and tourists who have an income in the range of Rp. 4,000,000 - Rp. 5,500,000 14%. The lowest percentage of travelers for revenue is Rp. 5,500,000 - Rp. 7,000,000 which amounted to 3%.

#### Way of Coming

Visitors comes at the most by way of a group, be it along with school friends, college friends, or friends from office with a percentage of 93%. As many as 5% of the respondents came with his family and as much as 2% of respondents came alone. This shows that the Marine Parks Olele according to travel with friends, family, or yourself.

#### Number of Company

In Figure 8 is seen that 44% of respondents came to the scene with a number of group travel as much as 6-10 people. 31% of respondents have a number of group 1-5 people. 22% of respondents with a number of groups of more than 10 people, and 3% of respondents came alone.

#### Motivation to Visit

In Figure 9 seen that 66% of respondents came to the location of Parks Seafood Olele for snorkeling, 17% of respondents came to diving, 12% of respondents have come to enjoy the scenery by using glass boats and 5% come with other objectives such as taking pictures only.

#### Characteristics of community

Community around the Marine Parks Olele should have a contribution in tourism activities at the site of the village and in general will receive the direct

impact of their activities this tour. Local people who were respondents as many as 16 people.

Socio-economic conditions

Socio-economic characteristics Olele Village community is still relatively modest. This is evident from the level of education and income. The education level of the community are mostly just completed primary school but based on interviews with community respondents are not a few people who feel that education is important so that many schools that have continued to follow similar programs like Package B and Package C.

Public perception

The existence of this tourist location known by most people. It can be seen from the public respondents who know that this location is a tourist attraction. The results of interviews with respondents, found that people felt no objection to the presence of the Marine Parks Olele. Of the 16 community respondents interviewed, most said that they do not feel the benefits of the Marine Parks Olele they think only certain people who benefit from Olele Marine Parks.

Characteristic of local business

Based on the type of business that is contained in Marine Park Olele tourist sites, including glass boat rentals, home stay, and food stalls.

Glass boat rental

glass boat used to see the underwater scenery from the boat. Location Marine Parks Olele has five (5) units of glass boats, 4 (four) of them are owned by the community for the assistance of the Government and 1 (one) of them are privately owned. Currently, glass boat which operates only three (3) units, 2 (two) glass boats government aid and 1 (one) glass boats private property. While the two (2) units of government assistance glass boats have not started to operate because there is no official submission to the community group manager.

Home stay

Home Stay at the scene Marine Parks Olele totaling five (5) houses and a relief from the Government. Each house was given assistance in the form of a 1 bedroom, 1 bathroom, 1 wardrobe, 1 bed,

2 chairs, and 1 table. The fee for rental of 200.000 room per night including breakfast.

Stalls and food stalls

Other local businesses located in the village of Olele is stall. Location Marine Parks Olele has several stalls or small kiosks that provide meals and snacks and drinks cold that takes tourists. As for the food stalls at the location of Marine Parks Olele only 1 (one) and has been open less than two (2) years with a capital of Rp. 3,000,000. Figure 11 shows the only diner in the village Olele.

Characteristics of the local workforce

Labour which is on site Olele Marine Parks is a local indigenous people. Local workforce in locations Marine Parks Olele consists of guiding a glass boat, diving guide, and employees of food stalls.

Economic impact analysis

According Vanhove (2005) in Milasari (2010) the economic impact of nature tourism activities can be found by following the flow of tourist expenditures and then estimate the impact of these expenses to total sales, income, employment and the acceptance of the local community. The economic impact is divided into three parts, the direct impact, indirect impact and effects of imitation. The results of a detailed analysis ra seca described in Table 1.

Table 1. Proporsi pengeluaran pengunjung di lokasi wisata Taman Laut Olele

| Biaya<br>(1)   | Nilai (Rp.)<br>(2) | Proporsi (%)<br>(3) |
|--|--------------------|---------------------|
| A. Pengeluaran di luar lokasi                        |                    |                     |
| 1. Biaya transportasi                                | 314.316            | 57,98               |
| 2. Konsumsi dari rumah                               | 26.231             | 4,84                |
| Total A  | 340.547            | 62,82               |
| B. Pengeluaran di dalam lokasi                       |                    |                     |
| 1. Konsumsi di lokasi                                | 23.105             | 4,26                |
| 2. Penyewaan fasilitas                               | 160.263            | 29,56               |
| 3. Dokumentasi                                       | 16.895             | 3,12                |
| 4. Toilet  | 1.084              | 0,20                |
| 5. Parkir  | 200                | 0,04                |
| Total B (Penerimaan di Lokasi Wisata)                | 201.547            | 37,18               |
| Total Pengeluaran Wisatawan (C)                      | 542.094            | 100                 |
| Kunjungan Wisatawan per bulan (D) orang              |                    | 500                 |
| Total pengeluaran wisatawan perbulan di lokasi (Rp.) |                    | 100.773.684         |
| Total Kebocoran per bulan (Rp.)                      |                    | 170.273.279,35      |

(Primary Data, 2015)

## Direct Impact

Direct economic impact of tourism activities Marine Park Olele derived from economic activities occurring between tourists and local communities that have business units in this tourist location. Local business units contained within the Marine Parks Olele including stalls and food stalls, home stay, and the glass boat.

Table 2. The proportion of revenue and production costs on receipt of the total respondents in the business unit Marine Parks Olele

| Biaya                                    | Nilai (Rp.) | Proporsi (%) |
|--|-------------|--------------|
| (1)                                      | (2)         | (3=2/4*100)  |
| A. Biaya di luar lokasi wisata           |             |              |
| 1. Biaya oprasional unit usaha (listrik) | 75.556      | 1,84         |
| Total A (Kebocoran)                      | 75.556      | 1,84         |
| B. Biaya di dalam lokasi wisata          |             |              |
| 2. Pendapatan pemilik                    | 2.722.222   | 66,27        |
| 3. Upah karyawan                         | 115.556     | 2,81         |
| 4. Pembelian bahan baku                  | 1.094.444   | 26,65        |
| 5. Biaya pemeliharaan alat               | 50.833      | 1,24         |
| 6. Transportasi local                    | 48.889      | 1,19         |
| Total B (Penerimaan di lokasi wisata)    | 4.031.944   | 98,16        |
| Total (4 = total A + total B)            | 4.107.500   | 100          |

Source: Analyzed Primary Data, 2015

The lack of tourists who come to be one of the causes of low income business units that exist in tourism. The proportion of labor in tourism is still low at 2.81% or Rp. 115 556 of the average total income of the business unit. This is because the majority of business units located around the tourist sites, manage their own business unit and managed together as a group. Only a few business units such as glass boats and food stalls which employ others to help manage the business unit.

Table 3. Distribution of respondents' income business unit owners and the direct impact is felt in the Marine Parks Olele

| Jenis Usaha                            | Jumlah Sampel | Rata-Rata Pendapatan (Rp.) | Jumlah (Unit) | Total Pendapatan (Rp.) |
|--|---------------|----------------------------|---------------|------------------------|
|  | (1)           | (2)                        | (3)           | (4=2*3)                |
| Perahu kaca                            | 1             | 5.500.000                  | 3             | 16.500.000             |
| Home Stay                              | 5             | 200.000                    | 5             | 1.000.000              |
| Warung Makan                           | 1             | 6.000.000                  | 1             | 6.000.000              |
| Warung                                 | 2             | 6.000.000                  | 6             | 36.000.000             |
| Total Penerimaan (Dampak Langsung) Rp. |               |                            |               | 59,500,000             |

Source: Analyzed Primary Data, 2015

Based on Table 3, that the glass boat rental business unit has the most revenue among other types of business units that are in the Marine Parks Olele which is an average of Rp. 5,500,000 per month, while revenues smallest business unit which only had a home stay r verage revenue of Rp. 200,000 per month. Based on Table 2, receiving an average of all respondents business units namely Rp. 4,031,944 per month, of the total receipts are income business unit owners (direct economic impact) are perceived by the owner of the business unit is Rp. 2,722,222 per month. The direct impact on the overall business units located around the tourist sites in the amount of Rp.59 .500.000 per month.

## Indirect Impact

Indirect economic impact (indirect impact) can be seen from the purchase of raw materials for the purposes of business units, local transportation, and labor working in business units that are in the vicinity of Marine Parks Olele. Workers who work in the business units is the recipient of indirect impact of tourist expenditure, in the form of their wages from the business units where they work (Belinda, 2013).

Table 4. The distribution of the total cost of business units in tourist locations and indirect economic impact is felt due to the presence of Marine Parks Olele

| Jenis Usaha                       | Jumlah Unit Usaha | Upah TK (Rp.) | Bahan Baku (Rp.) | Transp ortasi (Rp.) | Total Biaya (Rp.) | Total (Rp.) |
|-----------------------------------|-------------------|---------------|------------------|---------------------|-------------------|-------------|
|                                   | (1)               | (2)           | (3)              | (4)                 | (5=2+3+4)         | (6=1*5)     |
| Perahu kaca                       | 3                 | 800.000       | 1.350.000        | 200.000             | 2.350.000         | 7.050.000   |
| Home Stay                         | 5                 | 0             | 0                | 0                   | 0                 | 0           |
| Warung Makan                      | 1                 | 240.000       | 3.000.000        | 80.000              | 3.320.000         | 3.320.000   |
| Warung                            | 6                 | 0             | 2.750.000        | 80.000              | 2.830.000         | 16.980.000  |
| Total Dampak Tidak Langsung (Rp.) |                   |               |                  |                     | 27.350.000        | 0           |

Source: Analyzed Primary Data, 2015

The business unit that routinely require manpower is the diner and the glass boat. The number of workers at the site of Parks Seafood Olele amounted to only 6 to guide the glass boat and one person working at the diner. Labor about a party that does not directly get the economic impact of the

presence of objects that travel through their income as they can from the owner of the business units around tourist sites. Can be seen in Table 4, for labor obtained vary depending on the type of business units where they work. The indirect impact in the form of wages (income) felt the greatest labor of labor that guides a glass boat which is an average of Rp. 800,000 per month.

Purchase of raw materials (input) to meet the needs of business units, the largest input purchasing costs incurred by small diner type of unit is Rp. 3,000,000, type of shop or kiosk business unit amounted to Rp. 2,750,000, type of business unit glass boat Rp. 1,350,000, and home stay does not incur the cost of purchasing raw materials.

Based on Table 4, it can be seen that the magnitude of indirect economic impact that can be felt from the presence of Marine Parks Olele vary depending on the type of business units. Indirect economic impact is felt most is of the type of business unit stalls or kiosks, this is because most of the business units are located in the tourist area around is dominated by food and beverage outlets, namely Rp. 16.98 million. The amount of indirect economic impact that can be felt from the presence of Marine Parks Olele can be seen from the amount of the total costs incurred by all business units namely Rp. 27.35 million per month.

#### Induced Impact

Tourism activities not only generate direct and indirect impacts, but also produce aftereffects. The impact of the continuing impact of the expenditure made by the workforce of around tourism. This impact is derived from daily expenditure of labor around.

Table 5. The proportion of respondents labor expenditure and the rate of leakage in the Marine Parks Olele

| Biaya                           | Nilai (Rp.) | Proporsi (%) |
|---------------------------------|-------------|--------------|
| (1)                             | (2)         | (3)          |
| A. Biaya di luar lokasi wisata  |             |              |
| 1. Biaya listrik                | 26.429      | 1,84         |
| Total A (Kebocoran)             | 26.429      | 1,84         |
| B. Biaya di dalam lokasi wisata |             |              |
| 1. Kebutuhan Pangan             | 700.000     | 48,76        |
| 2. Biaya Transportasi           | 121.429     | 8,46         |

|                                       |           |       |
|---------------------------------------|-----------|-------|
| 3. Biaya Sekolah Anak                 | 277.714   | 19,35 |
| 4. Biaya Lainnya                      | 310.000   | 21,59 |
| Total B (Penerimaan di lokasi wisata) | 1.409.143 | 98,16 |
| Total (C = total A + total B)         | 1.435.571 | 100   |

Source: Analyzed Primary Data, 2015

In general, the average total expenditure of labor respondents is Rp. 1435571. However, the average labor expenses are included leakage (leakages) that charges are not incurred around the tourist sites of Rp. 26 429 with the proportion of 1.84% of average total expenditure of labor. As for costs incurred outside the tourist area that is the cost of electricity. Remainder is equal to 98.16% or with the value of Rp. 1,409,143 of the average total labor expenditures incurred in the tourist area.

Table 6. Distribution of respondents spending Labor (TK) and Advanced Impact felt in Marine Parks Olele

| Jenis Pekerjaan                                    | TK Total (Orang) | Pengeluaran perbulan (Rp.) | Total Pengeluaran (Rp.) |
|--|------------------|----------------------------|-------------------------|
|  | (1)              | (2)                        | (3=1*2)                 |
| Pemandu Perahu kaca                                | 6                | 876.667                    | 5.260.000               |
| Warung Makan                                       | 1                | 500.000                    | 500.000                 |
| Guide Diving                                       | 3                | 2.306.333                  | 6.919.000               |
| Total  | 10               |                            | 12.679.000              |
| Proporsi Penerimaan di lokasi wisata (Tabel 8) (4) |                  |                            | 98,16                   |
| Dampak Lanjutan (Total 3*4/100)                    |                  |                            | 12.445.582              |

(Sumber: Data Primer Diolah, 2015)

Total expenditure of labor around the area of Marine Parks Olele is Rp. 12.679 million. However, of the total expenditures are costs that are not carried in the tourist area (electrical charge) with the proportion of 1.84% (Table 5), or Rp. 26 429 of the total expenditure overall workforce. Remainder is equal to 98.16% of expenses are incurred in a tourist area, so that the perceived economic impact of their continued existence Olele Marine Parks is Rp. 12,445,582.

#### The multiplier effect of visitors' spending

Based on data obtained to determine the magnitude of the economic impact on Olele Marine Parks, the value of Keynesian Multiplier Effect that is equal to 0.99, which means any increase in tourist expenditure of the rupiah, it will have a direct impact on the economy of 0.99 rupiah surrounding community. Value Type 1 Income Multiplier Ratio is

1.21, which means any increase in the rupiah at the reception business unit will result in an increase of 1.21 rupiah against labor income around (in the form of income business owners and labor). Furthermore, the value derived from Type 2 Income Multiplier Ratio of 1.67 which means that in case of increase of the rupiah at the reception business unit is expected to result in an increase of 1.67 rupiah in revenue business unit owners, labor income and consumption expenditure of labor local level.

The economic impact of this research is going on to say low, it can be seen from the Keynesian Income Multiplier value obtained is equal to 0.99. According Dristasto (2013) where the value lies between zero to one ( $0 < x < 1$ ), then the value of tourist sites have low economic impact. This is because the tourists who come to this location is more likely to pull out its spending beyond tourism. In other words, the proportion of leakage / spending beyond the tourist sites is greater than the proportion of expenditure on travel locations. While the Income Multiplier Ratio Type 1 and Type II Income Multiplier can be said to have economic impact on travel activity for Income Multiplier Ratio value of Type 1 and Type II is greater than or equal to one ( $\geq 1$ ).

## Conclusion and Suggestion

Based on the research results, it can be concluded the economic impact on the income of nautical tourism in the village community Olele Bone Bolango District has provided the economic impact to the community walaupun impact is felt to be in the category of low and have not been felt equally by society. Income Keynesian Multiplier value is 0.99, Type 1 Income Multiplier Ratio is 1.21 and Type 2 Income Multiplier Ratio is 1.67. Direct economic impact in the form of income business unit owner in the amount of 66.27%, an indirect impact in the form of labor income is still very low at 2.81%, and the impact of advanced form of labor expenditures amounted to 48.76% is used for needs food.

The need for assistance is targeted to the public. Besides, the creativity of the community also needs to be improved and not just hope with the government. For travelers would still preserve the underwater world in Marine Parks Olele to stay awake and able to continue to enjoy its beauty.

## References

- Dristasto A, dan Annisa AA. 2013. Analisis Dampak Ekonomi Wisata Bahari Terhadap Pendapatan Masyarakat di Pulau Tidung. Reka Loka Jurnal Online Institut Teknologi Nasional, Itenas | No.x | Vol. xx Januari 2013. Institut Teknologi Nasional
- Ikhsan dan Bilal. 2014. Willingness To Pay Masyarakat Untuk Melindungi Terumbu Karang di Pulau Weh. Jurnal Kebangsaan, Vol.3 No.5 Januari 2014. Fakultas Ekonomi. Universitas Syiah Kuala Banda Aceh
- Milasari. 2010. Analisis Dampak Ekonomi Kegiatan Wisata Alam (Studi Kasus : Taman Wisata Tirta Sanita, Kabupaten Bogor). Skripsi. Departemen Ekonomi Sumberdaya Dan Lingkungan. Fakultas Ekonomi dan Manajemen. Institut Pertanian Bogor
- Nurfiana E. 2013. Analisis Dampak Ekonomi dan Lingkungan Kegiatan Wisata di Taman Wisata Alam Grojogan Sewu, Kabupaten Karanganyar, Provinsi Jawa Tengah Terhadap Masyarakat Sekitar. Skripsi. Departemen Ekonomi Sumberdaya dan Lingkungan. Fakultas Ekonomi dan Manajemen. Institut Pertanian Bogor
- SK Bupati Bone Bolango No. 165 Tahun 2006 tentang Penetapan Kawasan Konservasi Laut Daerah Desa Olele.