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## LAMPIRAN

### Lampiran 1. Surat izin penelitian



**PEMERINTAH KABUPATEN INDRAMAYU**  
**BADAN PERENCANAAN PEMBANGUNAN, PENELITIAN**  
**DAN PENGEMBANGAN DAERAH**

JL. Let. Jend. S. Parman No. 15 Indramayu Kode Pos 45212, Jawa Barat  
 Telp. Fax. (0234) 271711 Website : <http://bappeda.indramayukab.go.id>

#### **SURAT KETERANGAN PENELITIAN**

Nomor : 00.9.2/533.d/Litbang

1. Yang bertandatangan dibawah ini : Kepala Badan Perencanaan Pembangunan, Penelitian dan Pengembangan Daerah (BAPPEDA-LITBANG) Kabupaten Indramayu.

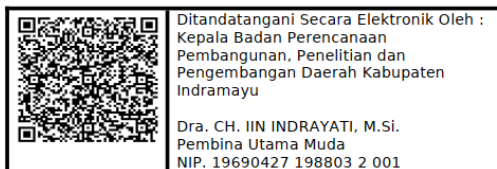
Berdasarkan Surat dari : Universitas Hasanuddin Nomor :  
 18932/UN4.20.1/PT.01.04/2023 Tanggal 25  
 November 2023 Perihal Permohonan Ijin Penelitian.

Memberikan Surat Keterangan Penelitian Kepada:

|                                 |                                                                                                                                                                                                                                  |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| a. Nama dan NIM                 | : Muh. Ainun Beddu<br>P032221008                                                                                                                                                                                                 |
| b. No Tlp/Email                 | : 085298559690/muh.ainun97@gmail.com                                                                                                                                                                                             |
| c. Pekerjaan                    | : Mahasiswa Program Studi Pascasarjana Pengelolaan Lingkungan Hidup                                                                                                                                                              |
| d. Instansi                     | : Universitas Hasanuddin                                                                                                                                                                                                         |
| e. Maksud                       | : Penelitian Tesis                                                                                                                                                                                                               |
| f. Judul                        | : Analisis Strategi Pengelolaan Ekowisata Mangrove Berkelanjutan di Desa Karangsong Kabupaten Indramayu                                                                                                                          |
| g. Waktu Penelitian             | : 19 Juni - 19 November 2024                                                                                                                                                                                                     |
| h. Lokasi / Instansi Penelitian | : Ekowisata Mangrove Karangsong, Desa Karangsong, Dinas Perikanan dan Kelautan, Perum Perhutani, Dinas Pariwisata Pemuda dan Olahraga, Dinas Lingkungan Hidup, Badan Perencanaan Pembangunan, Penelitian dan Pengembangan Daerah |

- Sehubungan maksud tersebut, diharapkan agar pihak yang terkait dapat memberikan bantuan/fasilitas yang diperlukan.
- Setelah selesai melaksanakan kegiatan penelitian agar menyerahkan dokumen hasil penelitian baik berupa salinan cetak atau salinan digital kepada Bappeda-Litbang Kabupaten Indramayu.
- Demikian Surat Keterangan Penelitian ini dibuat untuk dipergunakan sebagaimana mestinya.

Indramayu, 14 Juni 2024

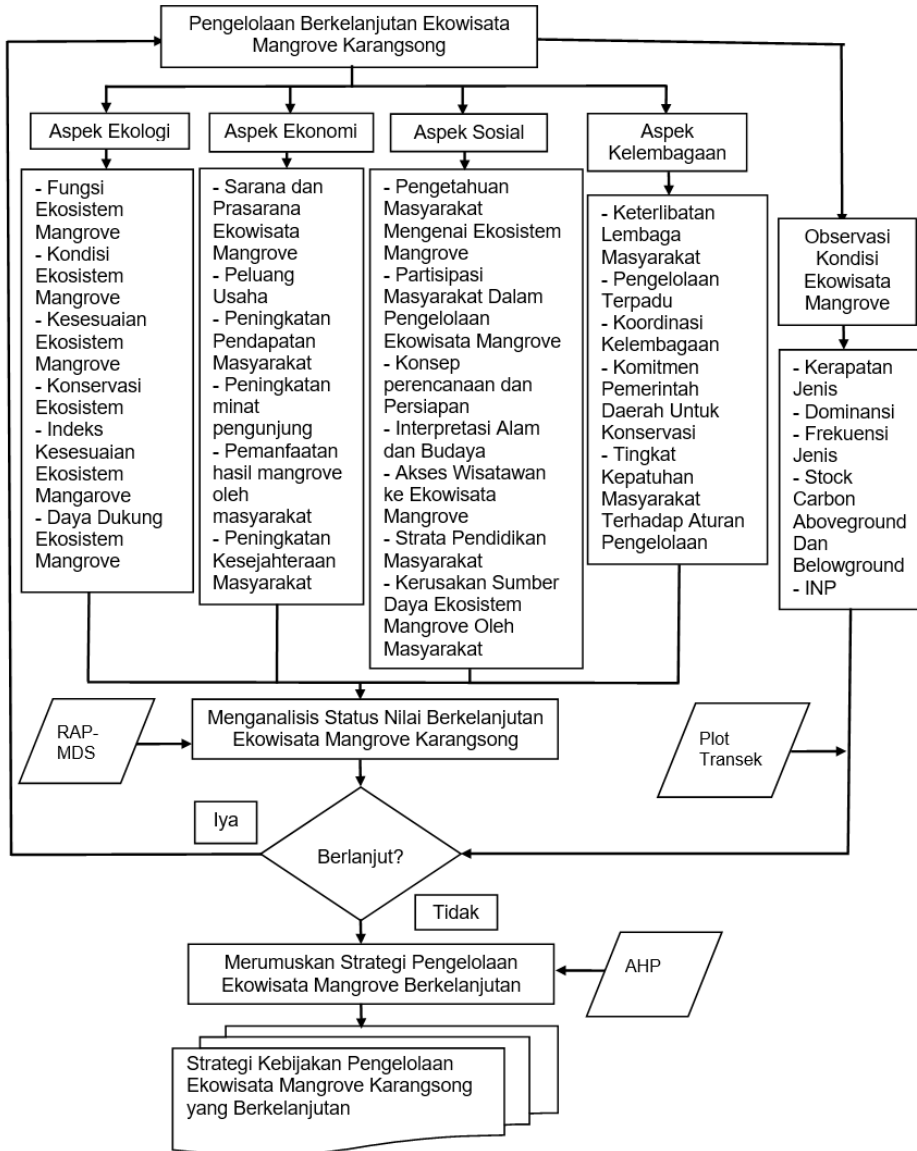


**Catatan :**

- ✓ UU ITE No 11 Tahun 2008 Pasal 5 ayat 1
- ✓ "Informasi Elektronik dan/atau Dokumen Elektronik dan/atau hasil cetaknya merupakan alat bukti hukum yang sah."
- ✓ Dokumen ini telah ditandatangani secara elektronik menggunakan **sertifikat elektronik** yang diterbitkan **BSrE**.



## Lampiran 2. Kerangka penelitian





**Lampiran 3.** Observasi ekologi ekowisata mangrove Karangsong

|                                                                                     |                                                                                      |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|    |    |
| Pembuatan plot transek                                                              | Pembuatan plot transek                                                               |
|   |   |
| Pembuatan plot transek                                                              | Pembuatan plot transek                                                               |
|  |  |
| Menghitung DBH mangrove                                                             | Identifikasi jenis mangrove                                                          |

**Lampiran 4.** Kondisi ekowisata mangrove Karangsong

|                                                                                     |                                                                                      |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|    |    |
| <p>Sampah yang berserakan</p>                                                       | <p>jembatan yang rusak</p>                                                           |
|   |   |
| <p>Jalan setapak yang rusak</p>                                                     | <p>Learning center yang terbengkalai</p>                                             |
|  |  |
| <p>Jalan setapak yang rusak</p>                                                     | <p>Gazebo yang rusak</p>                                                             |



|                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|    |   |
| Kantin yang terbengkalai                                                            | Papan informasi yang rusak                                                          |
|   |  |
| Sarana yang rusak                                                                   | Menara yang lapuk                                                                   |
|  |  |
| Papan informasi yang rusak                                                          | Toilet yang rusak                                                                   |

**Lampiran 5. Menilai status berkelanjutan ekowisata mangrove Karangsong**

|                                                                                     |                                                                                      |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|    |    |
| Interview dan kuisisioner pengelola                                                 | Interview dan kuisisioner pengelola                                                  |
|   |   |
| Interview dan kuisisioner masyarakat                                                | Interview dan kuisisioner masyarakat                                                 |
|  |  |
| Interview dan kuisisioner wisatawan                                                 | Interview dan kuisisioner wisatawan                                                  |

## Lampiran 6. Atribut RAPMForest

### 1. Aspek Ekologi

|    | A                                          | B                   | C              | D                         | E                          | F                             | G                   | H                        | I                              |
|----|--------------------------------------------|---------------------|----------------|---------------------------|----------------------------|-------------------------------|---------------------|--------------------------|--------------------------------|
|    | <b>Attributes &gt; Mangrove Management</b> | <b>Abbreviation</b> | <b>EKOLOGI</b> | Fungsi ekosistem mangrove | Kondisi ekosistem mangrove | Kesesuaian ekosistem mangrove | Konservasi mangrove | Indeks kesesuaian wisata | Daya dukung ekosistem mangrove |
| 1  |                                            |                     |                |                           |                            |                               |                     |                          |                                |
| 2  | <b>PENGELOLAAN MANGROVE</b>                | <b>PSS</b>          |                | 1                         | 1                          | 1                             | 1                   | 1                        | 1                              |
| 3  |                                            |                     |                |                           |                            |                               |                     |                          |                                |
| 4  |                                            |                     |                |                           |                            |                               |                     |                          |                                |
| 5  | <b>Reference Est:</b>                      |                     |                |                           |                            |                               |                     |                          |                                |
| 6  | <b>GOOD</b>                                | 1                   |                | 2                         | 2                          | 2                             | 2                   | 2                        | 2                              |
| 7  | <b>BAD</b>                                 | 2                   |                | 0                         | 0                          | 0                             | 0                   | 0                        | 0                              |
| 8  | <b>UP</b>                                  | 3                   |                | 2                         | 2                          | 2                             | 0                   | 0                        | 0                              |
| 9  | <b>DOWN</b>                                | 4                   |                | 0                         | 0                          | 0                             | 2                   | 2                        | 2                              |
| 10 | <b>Anchor Est:</b>                         | 1                   |                | 2                         | 2                          | 2                             | 2                   | 2                        | 2                              |
| 11 |                                            | 2                   |                | 2                         | 2                          | 2                             | 2                   | 2                        | 0                              |
| 12 |                                            | 3                   |                | 2                         | 2                          | 2                             | 2                   | 0                        | 0                              |
| 13 |                                            | 4                   |                | 2                         | 2                          | 2                             | 0                   | 0                        | 0                              |
| 14 |                                            | 5                   |                | 2                         | 2                          | 0                             | 0                   | 0                        | 0                              |
| 15 |                                            | 6                   |                | 2                         | 0                          | 0                             | 0                   | 0                        | 0                              |
| 16 |                                            | 7                   |                | 0                         | 0                          | 0                             | 0                   | 0                        | 0                              |
| 17 |                                            | 8                   |                | 0                         | 0                          | 0                             | 0                   | 0                        | 2                              |
| 18 |                                            | 9                   |                | 0                         | 0                          | 0                             | 0                   | 2                        | 2                              |
| 19 |                                            | 10                  |                | 0                         | 0                          | 0                             | 2                   | 2                        | 2                              |
| 20 |                                            | 11                  |                | 0                         | 0                          | 2                             | 2                   | 2                        | 2                              |
| 21 |                                            | 12                  |                | 0                         | 2                          | 2                             | 2                   | 2                        | 2                              |

### 2. Aspek Ekonomi

|    | A                                          | B                   | C              | D                    | E                      | F                                 | G                            | H                                  | I                                    |
|----|--------------------------------------------|---------------------|----------------|----------------------|------------------------|-----------------------------------|------------------------------|------------------------------------|--------------------------------------|
|    | <b>Attributes &gt; Mangrove Management</b> | <b>Abbreviation</b> | <b>EKONOMI</b> | Sarana dan prasarana | Peluang usaha yang ada | Peningkatan pendapatan masyarakat | Peningkatan minat pengunjung | Pemanfaatan hasil tanaman mangrove | Peningkatan kesejahteraan masyarakat |
| 1  |                                            |                     |                |                      |                        |                                   |                              |                                    |                                      |
| 2  | <b>PENGELOLAAN MANGROVE</b>                | <b>PSS</b>          |                | 2                    | 1                      | 1                                 | 2                            | 1                                  | 2                                    |
| 3  |                                            |                     |                |                      |                        |                                   |                              |                                    |                                      |
| 4  |                                            |                     |                |                      |                        |                                   |                              |                                    |                                      |
| 5  | <b>Reference Est:</b>                      |                     |                |                      |                        |                                   |                              |                                    |                                      |
| 6  | <b>GOOD</b>                                | 1                   |                | 2                    | 2                      | 2                                 | 2                            | 2                                  | 2                                    |
| 7  | <b>BAD</b>                                 | 2                   |                | 0                    | 0                      | 0                                 | 0                            | 0                                  | 0                                    |
| 8  | <b>UP</b>                                  | 3                   |                | 2                    | 2                      | 2                                 | 0                            | 0                                  | 0                                    |
| 9  | <b>DOWN</b>                                | 4                   |                | 0                    | 0                      | 0                                 | 2                            | 2                                  | 2                                    |
| 10 | <b>Anchor Est:</b>                         | 1                   |                | 2                    | 2                      | 2                                 | 2                            | 2                                  | 2                                    |
| 11 |                                            | 2                   |                | 2                    | 2                      | 2                                 | 2                            | 2                                  | 0                                    |
| 12 |                                            | 3                   |                | 2                    | 2                      | 2                                 | 2                            | 0                                  | 0                                    |
| 13 |                                            | 4                   |                | 2                    | 2                      | 2                                 | 0                            | 0                                  | 0                                    |
| 14 |                                            | 5                   |                | 2                    | 2                      | 0                                 | 0                            | 0                                  | 0                                    |
| 15 |                                            | 6                   |                | 2                    | 0                      | 0                                 | 0                            | 0                                  | 0                                    |
| 16 |                                            | 7                   |                | 0                    | 0                      | 0                                 | 0                            | 0                                  | 0                                    |
| 17 |                                            | 8                   |                | 0                    | 0                      | 0                                 | 0                            | 0                                  | 2                                    |
| 18 |                                            | 9                   |                | 0                    | 0                      | 0                                 | 0                            | 2                                  | 2                                    |
| 19 |                                            | 10                  |                | 0                    | 0                      | 0                                 | 2                            | 2                                  | 2                                    |
| 20 |                                            | 11                  |                | 0                    | 0                      | 2                                 | 2                            | 2                                  | 2                                    |
| 21 |                                            | 12                  |                | 0                    | 2                      | 2                                 | 2                            | 2                                  | 2                                    |



## 3. Aspke Sosial

|    | A                                          | B                   | C             | D                              | E                              | F                                            | G                            | H               | I                                       |
|----|--------------------------------------------|---------------------|---------------|--------------------------------|--------------------------------|----------------------------------------------|------------------------------|-----------------|-----------------------------------------|
|    | <b>Attributes &gt; Mangrove Management</b> | <b>Abbreviation</b> | <b>SOSIAL</b> | Tingkat pengetahuan masyarakat | Tingkat partisipasi masyarakat | Konsep perencanaan dan persiapan pengelolaan | Interpretasi alam dan budaya | Akses wisatawan | Kerusakan sumberdaya ekosistem mangrove |
| 1  |                                            |                     |               |                                |                                |                                              |                              |                 |                                         |
| 2  | <b>PENGELOLAAN MANGROVE</b>                | <b>PSS</b>          |               | 1                              | 1                              | 1                                            | 1                            | 1               | 1                                       |
| 3  |                                            |                     |               |                                |                                |                                              |                              |                 |                                         |
| 4  |                                            |                     |               |                                |                                |                                              |                              |                 |                                         |
| 5  | Reference Est:                             |                     |               |                                |                                |                                              |                              |                 |                                         |
| 6  | GOOD                                       | 1                   |               | 2                              | 2                              | 2                                            | 2                            | 2               | 2                                       |
| 7  | BAD                                        | 2                   |               | 0                              | 0                              | 0                                            | 0                            | 0               | 0                                       |
| 8  | UP                                         | 3                   |               | 2                              | 2                              | 2                                            | 0                            | 0               | 0                                       |
| 9  | DOWN                                       | 4                   |               | 0                              | 0                              | 0                                            | 2                            | 2               | 2                                       |
| 10 | Anchor Est:                                | 1                   |               | 2                              | 2                              | 2                                            | 2                            | 2               | 2                                       |
| 11 |                                            | 2                   |               | 2                              | 2                              | 2                                            | 2                            | 2               | 0                                       |
| 12 |                                            | 3                   |               | 2                              | 2                              | 2                                            | 2                            | 0               | 0                                       |
| 13 |                                            | 4                   |               | 2                              | 2                              | 2                                            | 0                            | 0               | 0                                       |
| 14 |                                            | 5                   |               | 2                              | 2                              | 0                                            | 0                            | 0               | 0                                       |
| 15 |                                            | 6                   |               | 2                              | 0                              | 0                                            | 0                            | 0               | 0                                       |
| 16 |                                            | 7                   |               | 0                              | 0                              | 0                                            | 0                            | 0               | 0                                       |
| 17 |                                            | 8                   |               | 0                              | 0                              | 0                                            | 0                            | 0               | 2                                       |
| 18 |                                            | 9                   |               | 0                              | 0                              | 0                                            | 0                            | 2               | 2                                       |
| 19 |                                            | 10                  |               | 0                              | 0                              | 0                                            | 2                            | 2               | 2                                       |
| 20 |                                            | 11                  |               | 0                              | 0                              | 2                                            | 2                            | 2               | 2                                       |
| 21 |                                            | 12                  |               | 0                              | 2                              | 2                                            | 2                            | 2               | 2                                       |

## 4. Aspek Kelembagaan

|    | A                                          | B                   | C                  | D                               | E                                     | F                          | G                                                        |
|----|--------------------------------------------|---------------------|--------------------|---------------------------------|---------------------------------------|----------------------------|----------------------------------------------------------|
|    | <b>Attributes &gt; Mangrove Management</b> | <b>Abbreviation</b> | <b>KELEMBAGAAN</b> | Keterlibatan lembaga masyarakat | Koordinasi antar lembaga/stakeholders | Komitmen pemerintah daerah | Tingkat kepatuhan masyarakat terhadap peraturan yang ada |
| 1  |                                            |                     |                    |                                 |                                       |                            |                                                          |
| 2  | <b>PENGELOLAAN MANGROVE</b>                | <b>PSS</b>          |                    | 1                               | 1                                     | 1                          | 1                                                        |
| 3  |                                            |                     |                    |                                 |                                       |                            |                                                          |
| 4  |                                            |                     |                    |                                 |                                       |                            |                                                          |
| 5  | Reference Est:                             |                     |                    |                                 |                                       |                            |                                                          |
| 6  | GOOD                                       | 1                   |                    | 2                               | 2                                     | 2                          | 2                                                        |
| 7  | BAD                                        | 2                   |                    | 0                               | 0                                     | 0                          | 0                                                        |
| 8  | UP                                         | 3                   |                    | 2                               | 2                                     | 0                          | 0                                                        |
| 9  | DOWN                                       | 4                   |                    | 0                               | 0                                     | 2                          | 2                                                        |
| 10 | Anchor Est:                                | 1                   |                    | 2                               | 2                                     | 2                          | 2                                                        |
| 11 |                                            | 2                   |                    | 2                               | 2                                     | 2                          | 0                                                        |
| 12 |                                            | 3                   |                    | 2                               | 2                                     | 0                          | 0                                                        |
| 13 |                                            | 4                   |                    | 2                               | 0                                     | 0                          | 0                                                        |
| 14 |                                            | 5                   |                    | 0                               | 0                                     | 0                          | 0                                                        |
| 15 |                                            | 6                   |                    | 0                               | 0                                     | 0                          | 2                                                        |
| 16 |                                            | 7                   |                    | 0                               | 0                                     | 2                          | 2                                                        |
| 17 |                                            | 8                   |                    | 0                               | 2                                     | 2                          | 2                                                        |

**Lampiran 7. Analisis strategi ekowisata mangrove Karangsong**

Interview dan kuisisioner di Dinas Lingkungan Hidup Kabupaten Indramayu



Interview dan kuisisioner di Dinas Kelautan dan Perikanan Kabupaten Indramayu



Interview dan kuisisioner di Badan Perencanaan Pembangunan, Penelitian dan



## Pengembangan Daerah Kabupaten Indramayu



Interview dan kuisisioner di Dinas Pariwisata, Pemuda dan Olahraga Kabupaten Indramayu



Interview dan kuisisioner pada Kelompok Pantai Lestari selaku pengelola



## Interview dan kuisisioner pada Akademisi

### Lampiran 8. Pairwise comparison, vector eigen dan consistency ratio (CR)

1. Dinas Lingkungan Hidup Kabupaten Indramayu

[illegible]

2. Badan Perencanaan Pembangunan, Penelitian dan Pengembangan Daerah

[illegible]

3. Dinas Perikanan dan Kelautan Kabupaten Indramayu

| Kriteria    |             |             |             |             |             |             |             |             |             | Perhitungan λ maksimum |              |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------------------|--------------|
| Kriteria    | Ekologi     | Ekonomi     | Sosial      | Kelembagaan | Kriteria    | Ekologi     | Ekonomi     | Sosial      | Kelembagaan |                        | Vector Eigen |
| Ekologi     | 1           | 0.142857143 | 0.333333333 | 3           | Ekologi     | 0.088235294 | 0.088235294 | 0.071428571 | 0.214285714 | 0.115546218            |              |
| Ekonomi     | 7           | 1           | 3           | 7           | Ekonomi     | 0.617647059 | 0.617647059 | 0.642857143 | 0.5         | 0.5949537815           |              |
| Sosial      | 3           | 0.333333333 | 1           | 3           | Sosial      | 0.264705882 | 0.305882353 | 0.214285714 | 0.214285714 | 0.224789916            |              |
| Kelembagaan | 0.333333333 | 0.142857143 | 0.333333333 | 1           | Kelembagaan | 0.029411765 | 0.088235294 | 0.071428571 | 0.071428571 | 0.06512605             |              |
|             | 11.33333333 | 1.619047619 | 4.666666667 | 14          |             |             |             |             |             |                        |              |
|             |             |             |             |             |             |             |             |             |             | λ total                | 1.30952381   |
|             |             |             |             |             |             |             |             |             |             | CI                     | 0.077631052  |
|             |             |             |             |             |             |             |             |             |             | CR                     | 0.086256725  |

4. Dinas Pariwisata, Pemuda dan Olahraga Kabupaten Indramayu

| Kriteria    |         |             |        |             |             |             |             |             |             | Perhitungan λ maksimum |
|-------------|---------|-------------|--------|-------------|-------------|-------------|-------------|-------------|-------------|------------------------|
| Kriteria    | Ekologi | Ekonomi     | Sosial | Kelembagaan | Kriteria    | Ekologi     | Ekonomi     | Sosial      | Kelembagaan |                        |
| Ekologi     | 1       | 0.111111111 |        | 0.333333333 | Ekologi     | 0.055555556 | 0.073529412 | 0.027777778 | 0.045454545 | 0.050579323            |
| Ekonomi     | 9       | 1           | 5      | 2           | Ekonomi     | 0.5         | 0.661764706 | 0.694444444 | 0.681818182 | 0.123698063            |
| Sosial      | 5       | 0.2         | 1      | 1           | Sosial      | 0.277777778 | 0.132352941 | 0.138888889 | 0.136363636 | 0.171345611            |
| Kelembagaan | 3       | 0.2         | 1      | 1           | Kelembagaan | 0.166666667 | 0.132352941 | 0.138888889 | 0.136363636 | 0.143568033            |
|             | 18      | 1.511111111 | 7.2    | 7.333333333 |             |             |             |             |             |                        |
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## 5. Pengelola Ekowisata Mangrove Karangsong

| Kriteria    | Eologi      | Ekonomi     | Sosial | Kelembagaan |
|-------------|-------------|-------------|--------|-------------|
| Ekologi     | 1           | 7           | 9      | 3           |
| Ekonomi     | 0.142857143 | 0.333333333 | 3      | 0.333333333 |
| Sosial      | 0.111111111 | 0.333333333 | 1      | 0.333333333 |
| Kelembagaan | 0.333333333 | 3           | 3      | 1           |
|             | 1.587301587 | 11.33333333 | 16     | 4.666666667 |

| Kriteria    | Ekologi | Ekonomi     | Sosial | Kelembagaan | Vektor Eigen |
|-------------|---------|-------------|--------|-------------|--------------|
| Ekologi     | 0.63    | 0.617647059 | 0.5625 | 0.642857143 | 0.61325105   |
| Ekonomi     | 0.09    | 0.088235294 | 0.1875 | 0.071428571 | 0.102920966  |
| Sosial      | 0.07    | 0.029411765 | 0.0625 | 0.071428571 | 0.058355084  |
| Kelembagaan | 0.21    | 0.264705882 | 0.1875 | 0.214285714 | 0.219122899  |

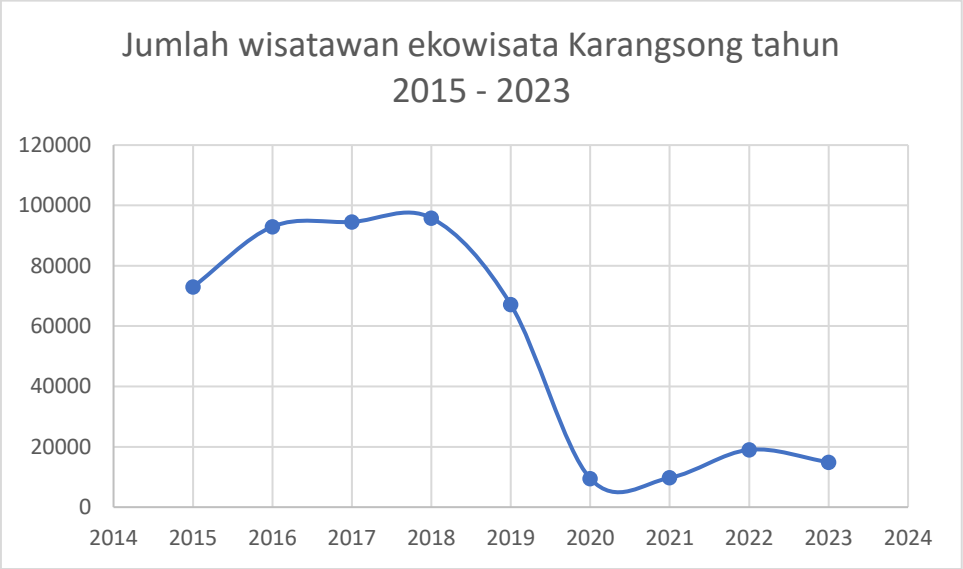
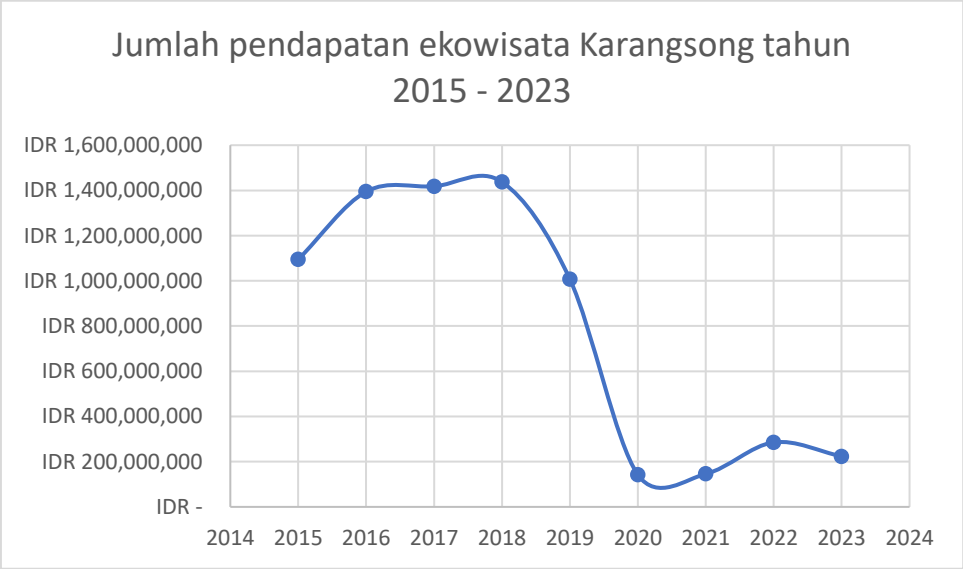
Perhitungan λ maksimum

0.973414966  
  
 1.286305952  
  
 0.93361345  
  
 1.02753529  
  
**λ total**  
 CI    0.055993397  
 CR    0.062214886

## 6. Akademisi

| Kriteria    |            |         |        |             |             |         |            |        |             | Perhitungan $\lambda$ maksimum |
|-------------|------------|---------|--------|-------------|-------------|---------|------------|--------|-------------|--------------------------------|
| Kriteria    | Ekologi    | Ekonomi | Sosial | Kelembagaan | Kriteria    | Ekologi | Ekonomi    | Sosial | Kelembagaan |                                |
| Ekologi     | 1          | 3       | 1      | 1           | Ekologi     | 0.3     | 0.5        | 0.25   | 0.25        | 0.325                          |
| Ekonomi     | 0.33333333 | 1       | 1      | 1           | Ekonomi     | 0.3     | 0.16666667 | 0.25   | 0.25        | 0.19166667                     |
| Sosial      | 1          | 1       | 1      | 1           | Sosial      | 0.3     | 0.16666667 | 0.25   | 0.25        | 0.24166667                     |
| Kelembagaan | 1          | 1       | 1      | 1           | Kelembagaan | 0.3     | 0.16666667 | 0.25   | 0.25        | 0.24166667                     |
|             | 3.33333333 | 6       | 4      | 4           |             |         |            |        |             |                                |
|             |            |         |        |             |             |         |            |        |             | $\lambda$ total                |
|             |            |         |        |             |             |         |            |        |             | CI                             |
|             |            |         |        |             |             |         |            |        |             | CR                             |

**Lampiran 9.** Jumlah pendapatan dan wisatawan ekowisata mangrove Karangsong



**Lampiran 10.** Daftar riwayat hidup***CURRICULUM VITAE*****A. Data Pribadi**

- |                          |                                       |
|--------------------------|---------------------------------------|
| 1. Nama                  | : Muh. Ainun Beddu                    |
| 2. Tempat, Tanggal Lahir | : Seppong, 11 Juli 1997               |
| 3. Alamat                | : Moncongloe, Maros, Sulawesi Selatan |
| 4. Kewarganegaraan       | : Warga Negara Indonesia              |

**B. Riwayat Pendidikan**

1. Tamat SLTA Tahun 2015 di SMA Negeri 1 Mangkutana
2. Diploma (D3) Tahun 2018 di Politeknik Negeri Ujung Pandang
3. Diploma (D4) Tahun 2021 di Politeknik Negeri Ujung Pandang
4. Magister (S2) Tahun 2024 di Universitas Hasanuddin

**C. Pekerjaan dan Riwayat Pekerjaan**

- |                    |                                             |
|--------------------|---------------------------------------------|
| 1. Jenis Pekerjaan | : Operator I PT Kilang Pertamina Balikpapan |
| 2. NIP             | : 29007689                                  |
| 3. Pangkat/Jabatan | : Operator                                  |

**D. Karya Ilmiah yang Telah Dipublik****E. asikan**

Beddu, M. A., Idrus, R. M., M., Samawi, F., Paradiman, A. Z., and Jafar, I. (2024). Analysis of Sustainable Mangrove Ecotourism Management Strategies in Karangsong Village, Indramayu Regency. Watershed Ecology and the Environment; [under review](#)