**International Journal of Informatics, Economics, Management and Science (IJIEMS)**
http://journal.stmikjayakarta.ac.id/index.php/ijiems
**E-ISSN:** 2809-8471 (online), **P-ISSN:** 2809-9281 (Print)
**DOI:** 10.52362/ijiems.v3i1.1238
Volume 3, Issue 1, January 2024, pp. 116-126

# Determining the Quality of Laying Parent Duck Seeds Using the SAW Method

**Widya Wati[1], Yusfrizal [2], Magdalena Simanjutak [3]**

[1,3] Information System, STMIK Kaputama, Binjai, [2] Universitas Potensi Utama, Medan

**Email address:**
Widyawwati24@gmail.com (Widya Wati), yusfrizal80@gmail.com (Yusfrizal), magdalena.simanjuntak84@gmail.com (Magdalena Simanjutak)

**Received:** July 22, 2023; **Accepted**: December 21, 2023 ; **Published**: January 23, 2024

**Abstract:** The selection of laying ducks on a farm is an important step for the continuity of activities in it. Increasing the selection of laying ducks requires quality standards to measure its success. This increase uses a simple additive weighting (saw) method in a decision support system. The increase in the selection of laying ducks is based on several criteria that have been applied, including the age of the ducks, the weight of the ducks, the shape of the duck feathers, and the shape of the duck wings. The results of this study indicate that the proposed model can be used properly in carrying out the selection of parent ducks for laying eggs. The SAW method is able to produce decisions in the form of the best alternative that can be used to assist decision makers. so that it can assist in the selection of broodstock ducks in an ordinary or intensive farm.

**Keywords**: Decision Support System, Mojosari duck, SAW

## 1. Introduction

As times progress and the development of information technology is currently developing very rapidly, there are guidelines for providing precise and accurate information. Human dependence on information is increasing, as is the increasingly advanced development of the world of information, it is also felt that high-speed and very accurate tools are needed in processing these workers to have the ability to do work quickly, and well with a small risk of error (Zulmi et al., 2018).

Determination of initial seeds from the poultry farming process is the most important stage to be able to proceed to the next stage. The initial poultry seeds determine the final result that will be obtained from the livestock process that has been carried out. Therefore, before choosing what type of poultry is most suitable and most profitable, it is necessary to conduct a survey and selection. Surveys can be carried out by conducting interviews with successful livestock owners (Saifulloh, 2022).

**DOI:** 10.52362/ijiems.v3i1.1238

**International Journal of Informatics, Economics, Management and Science (IJIEMS)**
http://journal.stmikjayakarta.ac.id/index.php/ijiems
**E-ISSN:** 2809-8471 (online), **P-ISSN:** 2809-9281 (Print)
**DOI:** 10.52362/ijiems.v3i1.1238
Volume 3, Issue 1, January 2024, pp. 116-126

The large number of broodstock of laying ducks makes the selection process feel less selective because it only focuses on the broodstock of laying ducks. In order to optimize the process of selecting the best seeds, a decision support system application is needed with certain criteria to assist in the process of selecting laying ducks. The results of this study indicate that the proposed model can be used properly in the selection process for laying ducks. The simple method of additive weighting (SAW) is able to produce decisions in the form of the best alternative that can be used to help decision-making parties. So that you can determine the quality of the parent duck laying seeds that are suitable for CV. ADAM LAMPOUH. Selection of broodstock for laying ducks on CV. ADAM LAMPOUH is one of the cases in terms of decision making. The selection process was assisted using the Simple Additive Weihting (SAW) Method.

A Decision Support System (DSS) or Decision Support System (DSS) is a set of systems capable of solving problems efficiently and effectively, which aims to assist decision makers in choosing various alternative decisions which are the result of processing the information obtained or available (criteria ) by using decision-making models (Anas et al., 2020).

SAW is one of the methods used to solve the problem of Fuzzy Multiple Attribute Decision Making (FMADM) is the Simple Additive Weighting (SAW) method, which is a method used to find optimal alternatives from a number of alternatives with certain criteria. The SAW method is often also known as the weighted addition method. The basic concept of SAW is to find the weighted sum of the performance ratings for each alternative on all attributes of the SAW method, which requires the process of normalizing the decision matrix (X) to a scale that can be compared with all existing alternative ratings (Saw, 2018).

## 2. Literature

This research was strengthened by the journal Journal of the National Seminar on Technological Innovation, UN PGRI Kediri, Universitas Nusantara PGRI Kediri, written by Yulva Irfan Anas, Rina Firliana, and Erna Daniati with the title "Decision Support System for Selecting Superior Seeds for Longan Plants Using the Saw Method (Simple Additive Weighting) ". Quality seeds are one of the keys to getting plantings that can provide optimal results. Quality seeds are seeds that come from pure varieties with a high germination percentage, free from pests and diseases and with the right water content. Seed quality is also determined by the variety, whether or not there are seed-borne diseases (Anas et al., 2020).

This research was strengthened by the journal Kaputama Information Systems Journal (JSIK), written by Irfan Fandinata and Budi Serasi Ginting with the title "DECISION SUPPORT SYSTEM FOR SELECTING SUPERIOR SEEDS OF HONEY GUAVA PLANT USING THE SAW METHOD". This study aims to apply the saw method in selecting superior honey guava seeds. In order to produce a Decision Support System that can assist in the selection of superior seeds. The influence of poor honey guava seeds can cause slow and stunted growth so that honey guava growth becomes slow and the honey guava harvest is hampered (Saw, 2018).

**International Journal of Informatics, Economics, Management and Science (IJIEMS)**
http://journal.stmikjayakarta.ac.id/index.php/ijiems
**E-ISSN:** 2809-8471 (online), **P-ISSN:** 2809-9281 (Print)
**DOI:** 10.52362/ijiems.v3i1.1238
Volume 3, Issue 1, January 2024, pp. 116-126

## 3. Methods

### 3.1 Simple Additive Weighting Method

SAW is one of the methods used to solve the problem of Fuzzy Multiple Attribute Decision Making (FMADM), namely the Simple Additive Weighting (SAW) method, which is a method used to find optimal alternatives from a number of alternatives with certain criteria. The SAW method is often also known as the weighted sum method. The basic concept of SAW is to find the weighted sum of the performance ratings for each alternative on all attributes. The SAW method requires a process of normalizing the decision matrix (X) to a scale that can be compared with all existing alternative ratings (Saw, 2018).

### 3.2 SAW method steps

1. Determine the alternative, namely Ai
2. Determine the criteria that will be used as a reference in decision making, namely Cj
3. Provide a rating for the suitability of each alternative for each criterion.
4. Determine the preference weight or level of importance (W) for each criterion.
5. Create a suitability rating table for each alternative for each criterion.
6. Create a decision matrix (X) which is formed from the suitability rating table of each alternative for each criterion. The X value of each alternative (Ai) for each predetermined criterion (Cj).

### 3.3 Perhitungan Dengan Metode Simpel Additive Weighting (SAW)

The basic concept of the SAW method is to find the weighted sum of the performance ratings for each alternative on all attributes. The SAW method requires a process of normalizing the decision matrix (X) to a scale that can be compared with all existing alternative ratings. The assessment process will be carried out for each selection of laying ducks.

1. Alternative

**Tabel III.1 Alternative**

| NAMA | UMUR ITIK (MINGGU) | | NUTRISI PAKAN ITIK (GR) | BENTUK BULU | BENTUK SAYAP |
|---|---|---|---|---|---|
| Itik 1 | 17 | Remaja | 85 | Campur | Simetris |
| Itik 2 | 28 | Dewasa | 90 | Sempurna | Tidak Simetris |
| Itik 3 | 15 | Remaja | 90 | Campur | Tidak Simetris |
| Itik 4 | 30 | Dewasa | 75 | Sempurna | Simetris |
| Itik 5 | 29 | Dewasa | 100 | Sempurna | Simetris |

**DOI:** 10.52362/ijiems.v3i1.1238

**International Journal of Informatics, Economics, Management and Science (IJIEMS)**
http://journal.stmikjayakarta.ac.id/index.php/ijiems
**E-ISSN:** 2809-8471 (online), **P-ISSN:** 2809-9281 (Print)
**DOI:** 10.52362/ijiems.v3i1.1238
Volume 3, Issue 1, January 2024, pp. 116-126

| | | | | | |
|---|---|---|---|---|---|
| Itik 6 | 20 | Remaja | 60 | Campur | Tidak Simetris |
| Itik 7 | 21 | Remaja | 65 | Campur | Simetris |
| Itik 8 | 25 | Remaja | 70 | Sempurna | Simetris |
| Itik 9 | 30 | Dewasa | 100 | Sempurna | Simetris |
| Itik 10 | 28 | Dewasa | 80 | Sempurna | Tidak Simetris |

**2. Criteria**

In the process of criteria and weighting that will be used in building a system to determine the quality of production of laying ducks in CV. ADAM LAMPOUH. There are 4 criteria that will be used in determining the quality of production of laying ducks.

**Tabel III.2 Criteria**

| Kriteria | Keterangan |
|---|---|
| C1 | Umur itik |
| C2 | Berat bobot itik |
| C3 | Bentuk bulu itik |
| C4 | Bentuk sayap itik |

3. Match ranking

The suitability ranking of each alternative for each criterion is assessed from 1-4 to assign values to the age of the duck, the weight of the duck, the shape of the duck's feathers, and the shape of the duck's wings as follows.

a. Duck Age Criteria as follows:

**Tabel III.3 Age of Ducks**

| Variabel (Minggu) | Bobot |
|---|---|
| <15 | 1 |
| 15-25 | 2 |
| 26-30 | 3 |
| 31-50 | 4 |

b. Duck Weight Criteria are as follows:

**Tabel III.4 Duck Weight**

| Variabel (Kg) | Bobot |
|---|---|
| 1-1.50 | 1 |

**DOI:** 10.52362/ijiems.v3i1.1238

**International Journal of Informatics, Economics, Management and Science (IJIEMS)**
http://journal.stmikjayakarta.ac.id/index.php/ijiems
**E-ISSN:** 2809-8471 (online), **P-ISSN:** 2809-9281 (Print)
**DOI:** 10.52362/ijiems.v3i1.1238
Volume 3, Issue 1, January 2024, pp. 116-126

| | |
|---|---|
| 1.60-2 | 2 |
| 2.10-3 | 3 |

c. Criteria for Duck Feather Shape are as follows:

**Tabel III.5 Duck Feather Shape**

| Bentuk Bulu Itik | Bobot |
|---|---|
| Sempurna | 1 |
| Campur | 2 |

d. The criteria for the shape of the duck's wings are as follows:

**Tabel III.6 Duck Wing Shape**

| Bentuk Sayap Itik | Bobot |
|---|---|
| Simetris | 1 |
| Tidak Simetris | 2 |

4. weight

**Tabel III.7 Weight**

| C1 | C2 | C3 | C4 |
|---|---|---|---|
| 0.25 | 0.15 | 0.2 | 0.4 |

5. Match ranking

The suitability ranking of each alternative for each criterion is assessed from 1-4 to assign values to the age of the duck, the weight of the duck, the shape of the duck's feathers and the shape of the duck's wings. It can be seen in table III.8 as follows.

**Tabel III.8 Ranking Kecocokan**

| Alternatif | Kriteria | | | |
|---|---|---|---|---|
| | C1 | C2 | C3 | C4 |
| Itik 1 | 2 | 1 | 2 | 1 |
| Itik 2 | 3 | 2 | 1 | 2 |
| Itik 3 | 2 | 2 | 2 | 2 |
| Itik 4 | 3 | 1 | 1 | 1 |
| Itik 5 | 3 | 2 | 1 | 1 |

**DOI:** 10.52362/ijiems.v3i1.1238

**International Journal of Informatics, Economics, Management and Science (IJIEMS)**
http://journal.stmikjayakarta.ac.id/index.php/ijiems
**E-ISSN:** 2809-8471 (online), **P-ISSN:** 2809-9281 (Print)
**DOI:** 10.52362/ijiems.v3i1.1238
Volume 3, Issue 1, January 2024, pp. 116-126

| | | | | |
|---|---|---|---|---|
| Itik 6 | 2 | 1 | 2 | 2 |
| Itik 7 | 2 | 1 | 2 | 1 |
| Itik 8 | 2 | 1 | 1 | 1 |
| Itik 9 | 3 | 3 | 1 | 2 |
| Itik 10 | 3 | 2 | 2 | 1 |

6. Decision Matrix (X)

$$X=\begin{bmatrix} 2 & 1 & 2 & 1 \\ 3 & 2 & 1 & 2 \\ 2 & 2 & 2 & 2 \\ 3 & 1 & 1 & 1 \\ 3 & 2 & 1 & 1 \\ 2 & 1 & 2 & 2 \\ 2 & 1 & 2 & 1 \\ 2 & 1 & 1 & 1 \\ 3 & 3 & 1 & 2 \\ 3 & 2 & 2 & 1 \end{bmatrix}$$

7. Normalizing the decision matrix using the simple additive weighting (SAW) method

$$r_{ij} = \frac{xij}{max\ xij}$$

If j is the attribute advantage (benefit)

$$\frac{min\ xij}{xij}$$

If j is the attribute cost (cost)

a. For duck age (C1), it includes the benefit attribute, because the greater the value, the better it is considered.

$$r_{11} = \frac{2}{Max(2,3,2,3,3,2,2,2,3,3)} = \frac{2}{3} = 0.66$$
$$r_{21} = \frac{3}{Max(2,3,2,3,3,2,2,2,3,3)} = \frac{3}{3} = 1$$
$$r_{31} = \frac{2}{Max(2,3,2,3,3,2,2,2,3,3)} = \frac{2}{3} = 0.66$$
$$r_{41} = \frac{3}{Max(2,3,2,3,3,2,2,2,3,3)} = \frac{3}{3} = 1$$
$$r_{51} = \frac{3}{Max(2,3,2,3,3,2,2,2,3,3)} = \frac{3}{3} = 1$$
$$r_{61} = \frac{2}{Max(2,3,2,3,3,2,2,2,3,3)} = \frac{2}{3} = 0.66$$
$$r_{71} = \frac{2}{Max(2,3,2,3,3,2,2,2,3,3)} = \frac{2}{3} = 0.66$$

**DOI:** 10.52362/ijiems.v3i1.1238

**International Journal of Informatics, Economics, Management and Science (IJIEMS)**
http://journal.stmikjayakarta.ac.id/index.php/ijiems
**E-ISSN:** 2809-8471 (online), **P-ISSN:** 2809-9281 (Print)
**DOI:** 10.52362/ijiems.v3i1.1238
Volume 3, Issue 1, January 2024, pp. 116-126

$$r_{81} = \frac{2}{Max(2,3,2,3,3,2,2,2,3,3)} = \frac{2}{3} = 0.66$$
$$r_{91} = \frac{3}{Max(2,3,2,3,3,2,2,2,3,3)} = \frac{3}{3} = 1$$
$$r_{101} = \frac{3}{Max(2,3,2,3,3,2,2,2,3,3)} = \frac{3}{3} = 1$$

b. For Duck Weight (C2), including the benefit attribute, because the greater the value, the better it is considered.

$$r_{12} = \frac{1}{Max(1,2,2,1,2,1,1,1,3,2)} = \frac{1}{3} = 0.33$$
$$r_{22} = \frac{2}{Max(1,2,2,1,2,1,1,1,3,2)} = \frac{2}{3} = 0.66$$
$$r_{32} = \frac{2}{Max(1,2,2,1,2,1,1,1,3,2)} = \frac{2}{3} = 0.66$$
$$r_{42} = \frac{1}{Max(1,2,2,1,2,1,1,1,3,2)} = \frac{1}{3} = 0.33$$
$$r_{52} = \frac{2}{Max(1,2,2,1,2,1,1,1,3,2)} = \frac{2}{3} = 0.66$$
$$r_{62} = \frac{1}{Max(1,2,2,21,2,1,1,1,3,2)} = \frac{1}{3} = 0.33$$
$$r_{72} = \frac{1}{Max(1,2,2,1,2,1,1,1,3,2)} = \frac{1}{3} = 0.33$$
$$r_{82} = \frac{1}{Max(1,2,2,1,2,1,1,1,3,2)} = \frac{1}{3} = 0.33$$
$$r_{92} = \frac{3}{Max(1,2,2,1,2,1,1,1,3,2)} = \frac{3}{3} = 1$$
$$r_{102} = \frac{2}{Max(1,2,2,1,2,1,1,1,3,2)} = \frac{2}{3} = 0.66$$

c. For Duck Feather Shape (C3), this includes the cost attribute, because the smaller the value, the better it is considered.

$$r_{13} = \frac{Min(2,1,2,1,1,2,2,1,1,2)}{2} = \frac{1}{2} = 0.5$$
$$r_{23} = \frac{Min(2,1,2,1,1,2,2,1,1,2)}{1} = \frac{1}{1} = 1$$
$$r_{33} = \frac{Min(2,1,2,1,1,2,2,1,1,2)}{2} = \frac{1}{2} = 0.5$$

**International Journal of Informatics, Economics, Management and Science (IJIEMS)**
http://journal.stmikjayakarta.ac.id/index.php/ijiems
**E-ISSN:** 2809-8471 (online), **P-ISSN:** 2809-9281 (Print)
**DOI:** 10.52362/ijiems.v3i1.1238
Volume 3, Issue 1, January 2024, pp. 116-126

$$r_{43} = \frac{Min(2,1,2,1,1,2,2,1,1,2)}{1} = \frac{1}{1} = 1$$
$$r_{53} = \frac{Min(2,1,2,1,1,2,2,1,1,2)}{1} = \frac{1}{1} = 1$$
$$r_{63} = \frac{Min(2,1,2,1,1,2,2,1,1,2)}{2} = \frac{1}{2} = 0.5$$
$$r_{73} = \frac{Min(2,1,2,1,1,2,2,1,1,2)}{2} = \frac{1}{2} = 0.5$$
$$r_{83} = \frac{Min(2,1,2,1,1,2,2,1,1,2)}{1} = \frac{1}{1} = 1$$
$$r_{93} = \frac{Min(2,1,2,1,1,2,2,1,1,2)}{1} = \frac{1}{1} = 1$$
$$r_{103} = \frac{Min(2,1,2,1,1,2,2,1,1,2)}{2} = \frac{1}{2} = 0.5$$

d. For Duck Wing Shape (C4), it includes the cost attribute, because the smaller the value, the better it is considered.

$$r_{14} = \frac{Min(1,2,2,1,1,2,1,1,2,1)}{1} = \frac{1}{1} = 1$$
$$r_{24} = \frac{Min(1,2,2,1,1,2,1,1,2,1)}{2} = \frac{1}{2} = 0.5$$
$$r_{34} = \frac{Min(1,2,2,1,1,2,1,1,2,1)}{2} = \frac{1}{2} = 0.5$$
$$r_{44} = \frac{Min(1,2,2,1,1,2,1,1,2,1)}{1} = \frac{1}{1} = 1$$
$$r_{54} = \frac{Min(1,2,2,1,1,2,1,1,2,1)}{1} = \frac{1}{1} = 1$$
$$r_{64} = \frac{Min(1,2,2,1,1,2,1,1,2,1)}{2} = \frac{1}{2} = 0.5$$
$$r_{74} = \frac{Min(1,2,2,1,1,2,1,1,2,1)}{1} = \frac{1}{1} = 1$$
$$r_{84} = \frac{Min(1,2,2,1,1,2,1,1,2,1)}{1} = \frac{1}{1} = 1$$
$$r_{94} = \frac{Min(1,2,2,1,1,2,1,1,2,1)}{1} = \frac{1}{2} = 0.5$$
$$r_{104} = \frac{Min(1,2,2,1,1,2,1,1,2,1)}{1} = \frac{1}{1} = 1$$

R Matrix Normalization Results:

**International Journal of Informatics, Economics, Management and Science (IJIEMS)**
http://journal.stmikjayakarta.ac.id/index.php/ijiems
**E-ISSN:** 2809-8471 (online), **P-ISSN:** 2809-9281 (Print)
**DOI:** 10.52362/ijiems.v3i1.1238
Volume 3, Issue 1, January 2024, pp. 116-126

$$R = \begin{bmatrix} 0.66 & 0.33 & 0.5 & 1 \\ 1 & 0.66 & 1 & 0.5 \\ 0.66 & 0.66 & 0.5 & 0.5 \\ 1 & 0.33 & 1 & 1 \\ 1 & 0.66 & 1 & 1 \\ 0.66 & 0.33 & 0.5 & 0.5 \\ 0.66 & 0.33 & 0.5 & 1 \\ 0.66 & 0.33 & 1 & 1 \\ 1 & 1 & 1 & 0.5 \\ 1 & 0.66 & 0.5 & 1 \end{bmatrix}$$

8. Ranking

At the ranking stage, the new value of each matrix is multiplied by the weight value that has been given by the decision maker, W=[0.25;\ 0.15;\ 0.2;\ 0.4] then, the ranking calculation process is carried out as follows:

$V_1 = (0.66 * 0.25) + (0.33 * 0.15) + (0.5 * 0.2) + (1 * 0.4) = 0.716$
$V_2 = (0.1 * 0.25) + (0.66 * 0.15) + (0.1 * 0.2) + (0.5 * 0.4) = 0.75$
$V_3 = (0.66 * 0.25) + (0.66 * 0.15) + (0.5 * 0.2) + (0.5 * 0.4) = 0.566$
$V_4 = (1 * 0.25) + (0.33 * 0.15) + (1 * 0.2) + (1 * 0.4) = 0.9$
$V_5 = (1 * 0.25) + (0.66 * 0.15) + (1 * 0.2) + (1 * 0.4) = 0.95$
$V_6 = (0.66 * 0.25) + (0.33 * 0.15) + (0.5 * 0.2) + (0.5 * 0.4) = 0.516$
$V_7 = (0.66 * 0.25) + (0.33 * 0.15) + (0.5 * 0.2) + (1 * 0.4) = 0.716$
$V_8 = (0.66 * 0.25) + (0.33 * 0.15) + (1 * 0.2) + (1 * 0.4) = 0.816$
$V_9 = (1 * 0.25) + (1 * 0.15) + (1 * 0.2) + (0.5 * 0.4) = 0.8$
$V_{10} = (1 * 0.25) + (0.66 * 0.15) + (0.5 * 0.2) + (1 * 0.4) = 0.85$

Tabel III.9 SAW Method Calculation Ranking

| Nama | Umur itik (minggu) | Berat bobot itik | Bentuk bulu itik | Bentuk sayap itik | NA | Ranking |
|---|---|---|---|---|---|---|
| Itik 1 | 17 | 1.50 | Campur | Simetris | 0.716 | 8 |
| Itik 2 | 28 | 1.55 | Sempurna | Tidak Simetris | 0.75 | 6 |
| Itik 3 | 15 | 1.60 | Campur | Tidak Simetris | 0.566 | 9 |
| Itik 4 | 30 | 1.65 | Sempurna | Simetris | 0.9 | 2 |
| Itik 5 | 29 | 1.55 | Sempurna | Simetris | 0.95 | 1 |
| Itik 6 | 20 | 1.40 | Campur | Tidak Simetris | 0.516 | 10 |
| Itik 7 | 21 | 1.50 | Campur | Simetris | 0.716 | 7 |
| Itik 8 | 25 | 1.50 | Sempurna | Simetris | 0.816 | 4 |
| Itik 9 | 30 | 2.12 | Sempurna | Tidak Simetris | 0.8 | 5 |
| Itik 10 | 28 | 1.60 | Campur | Simetris | 0.85 | 3 |

**DOI:** 10.52362/ijiems.v3i1.1238

**International Journal of Informatics, Economics, Management and Science (IJIEMS)**
http://journal.stmikjayakarta.ac.id/index.php/ijiems
**E-ISSN:** 2809-8471 (online), **P-ISSN:** 2809-9281 (Print)
**DOI:** 10.52362/ijiems.v3i1.1238
Volume 3, Issue 1, January 2024, pp. 116-126

## 4. Result And Discussion

Several stages in completing this research are:

A. Identify the problem

This stage is the initial stage in research, namely determining the background of the problem, objectives and benefits of the research so that it does not leave the discussion.

B. Theory study

This stage seeks information and sources related to the problems faced, both from literature, journals and the internet as support and basis for writing the thesis.

C. Data collection

This stage is the collection of data obtained through interviews, observation of supporting data.

D. Data analysis

This stage is the stage of processing and analyzing the data that has been obtained so that the data can be grouped according to the specified variables.

E. Testing and Implementation

This stage is the validation and implementation testing stage of data that has been previously analyzed and the data is program preparation.

F. Evaluation

This stage is the stage of drawing conclusions and suggestions that can be done in the preparation of the thesis. With the conclusion, it is known the overall results of the thesis and its benefits for others. The data collection used in compiling and completing the data is by means of observation, interviews and literature study.

A. Observation, Observations are carried out directly to obtain data carried out at the research site related to research carried out at CV. ADAM LAMPOUH.

B. Interviews. Interviews were conducted by communicating directly with those who handle Mojosari duck farming.

C. Literature Review, Literature study is carried out to obtain data and information by reading various written materials, scientific articles and other sources about issues related to writing.

## 5. Conclusion

5.1 Conclusion

Based on research that has been conducted during the implementation of the Simple Additive Weighting (SAW) method in the Decision Support System for determining the quality of laying ducks using the SAW method, some conclusions can be drawn as follows:

1. From the results of calculating the application of a decision support system using the SAW method, we get laying ducks with an age of 29 weeks, a weight of 1.55, perfect plumage, and symmetrical wings with the highest value of 0.95.

**International Journal of Informatics, Economics, Management and Science (IJIEMS)**
http://journal.stmikjayakarta.ac.id/index.php/ijiems
**E-ISSN:** 2809-8471 (online), **P-ISSN:** 2809-9281 (Print)
**DOI:** 10.52362/ijiems.v3i1.1238
Volume 3, Issue 1, January 2024, pp. 116-126

2. With this system, it will greatly help the CV agency. ADAM LAMPOUH in selecting laying ducks.
3. By using the SAW method, calculations can be done automatically when the Admin inputs values and alternative criteria for values, so as to reduce problems in making decisions in determining the quality of laying ducklings.

5.2 Suggestions

Based on the conclusions above, there are several suggestions that the author conveys so that the thesis writer on the same topic becomes better and more useful in the future. Among others are :

1. The decision support system for determining laying ducklings is still made in the form of a simple program, which can still be developed further to achieve data accuracy and see laying ducklings through the criteria they have.
2. The decision support system for determining the quality of laying ducks discusses 10 brood ducks and 4 criteria that determine the quality of laying ducks and can still be developed further by adding several criteria for laying ducks.
3. The decision support system for determining the quality of laying ducklings can also use other methods

**References**

[1] Anas, Y. I., Firliana, R., & Daniati, E. (2020). Decision Support System Pemilihan Bibit Unggul Tanaman Kelengkeng Menggunakan Metode Saw (Simple Additive Weighting). *Seminar Nasional Inovasi Teknologi UN PGRI Kediri*, *4*(3), 17–22. https://proceeding.unpkediri.ac.id/index.php/inotek/article/view/26%0Ahttps://proceeding.unpkediri.ac.id/index.php/inotek/article/download/26/3

[2] Saifulloh, S. (2022). Analisis pendukung keputusan menggunakan metode SAW dan MFEP dalam memilih unggas terbaik sebagai ternak potensial. *... SENDIKO (Seminar Nasional Hasil Penelitian & ...*, 40–48. http://prosiding.unipma.ac.id/index.php/sendiko/article/view/2232

[3] Saw, M. (2018). *SISTEM PENDUKUNG KEPUTUSAN PEMILIHAN BIBIT*. *2*(1), 27–36.

[4] Zulmi, R. A., Suparyanto dan Rosad (2015, Puspitarini, Publikasi, N., Kesehatan, F. I., Nugroho, A., Latihan, P., Tungkai, P., Pendidikan, U., Kahfi, M. K., Wiyaja, F. J. M., & Diputra, R. (2018). 済無No Title No Title No Title. *Jurnal SPORTIF : Jurnal Penelitian Pembelajaran*, *2*(6), 24–29. https://www.ptonline.com/articles/how-to-get-better-mfi-results%0Amuhammadkahfi16060474066@mhs.unesa.ac.id