The Role of Women Farming Groups on Vegetable Agribusiness Income
(A Case Study Women Farmers Group In Pala City, Dajan Peken Village, Tabanan District)

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Abstract

Vegetables are all types of plants that can be consumed or eaten either taken from the roots, stems, leaves, seeds, flowers, or other parts used to be processed into food. Vegetables are also one of the horticultural crop commodities that have an important role as a source of income for farmers' lives. This research was conducted at the KWT Pala City, Dajan Peken Village, Tabanan District, Tabanan Regency. The purpose of this study was to determine the income, level of farming efficiency, and contribution of KWT to family income in KWT Pala City, Dajan Peken Village, Tabanan District. The determination of respondents was carried out using the census method with a total of 20 respondents. The method in this research is income analysis and R/C Ratio. The results of this study indicate that the income of vegetable farming in the KWT of Pala City, during one production season, is IDR 22.016.900. The value of the R/C Ratio of vegetable farming in the KWT of Pala City is 2.18. It means the activities of vegetable farming in the place is worth to be developed because profitable in term of economy.

Keywords: Vegetable farming, Women Farmer Group, Income, R/C Ratio

1. Introduction

Indonesia is an agrarian country engaged in agriculture. Most Indonesian work as farmers. It comes from the fact the geographical location of Indonesia is in the tropics which has an appropriate climate to develop agricultural potential [10],[12],[17],[18],[20]. The role of the agricultural sector in Indonesia is very important in making a major contribution to the development of economic growth and welfare of farmers, contributing to high national income, and providing foreign exchange for the country [1],[2]. Where the economic growth and welfare of farmers depend on the level of income of farmers and the profits derived from the agricultural sector itself [21],[22],[23],[24],[25]. The agricultural sector also has a very important role as the main source of income for farming communities, especially vegetable farmers [5],[7],[11], [16].

Vegetables play an important role as a source of income that can meet the needs of farmers. Vegetables are one of the commodities that have bright prospects for development. Due to their function as daily needs, the demand for vegetables is rising from year to year [3],[4],[6],[8],[9].

The Indonesian government took the initiative to deal with the problem of poverty in the country, namely by establishing an institution that was given to women. Women Farmers Group (KWT) is a farmer group that empowers women workers to contribute to farming activities as well as other activities that can increase earnings [13],[14],[15].

Dajan Peken Village is one of the villages located in Tabanan District, Tabanan Regency, Bali Province, which runs the Women Farmers Group (KWT) program. The Women Farmers Group (KWT) in Dajan Peken Village was named KWT Pala City, which was established in 2016. However, it was legalized by the government and already has an official permit and legal status in 2017. The number of group members in the Pala City KWT is 20 people, and each member in the Cempaka KWT cultivates almost 10 acres of land/per person. Land managed by the group is privately owned (group member) and Pala City KWT only has a land area of 5 acres. KWT Kota Pala manages various vegetable commodities, including green beans, mustard greens, and cabbage. From the past until now, the Pala City KWT is still active in carrying out activities in the agricultural sector, starting from processing its agricultural land to marketing its agricultural products, as well as holding several meetings between group members to coordinate and remain united in carrying out group activities. From the description above, there are several problem formulations: 1) What is the income of vegetable farming in the Women Farmers Group (KWT) Pala City, Dajan Peken Village? 2) What is the efficiency level of vegetable farming in the Women Farmers Group (KWT) Pala City, Dajan Peken Village? And, 3) What is the contribution of the Women Farmers Group to the family income in the Women Farmers Group (KWT) in Pala City?

This study aims to determine: 1) The size of the income of vegetable farming in the Women Farmers Group (KWT) Pala City 2) the efficiency rate of vegetable farming in the Women Farmers Group (KWT) Pala City 3) The contribution of the Women Farmers Group to the family income in the Women Farmers Group (KWT) in Pala City.

2. Material and Methods

This research was conducted in KWT Pala City, Dajan Peken Village, Tabanan District. This research was conducted for 3 months, from August to October 2022.
The types of data used in this research are as follows:
1. Quantitative data is data in the form of numbers that can be calculated and expressed in units of calculation. Quantitative data in this study include land area, amount of production, production costs, the selling price of vegetables, and age.
2. Qualitative data is data in the form of words, sentences, pictures, or data in the form of descriptions that are not in the form of numbers and cannot be measured in units of calculation but are information related to this problem. The quality data in this study include the respondent's occupations.
Sources of data used in this study are as follows:
1. Primary data is a source of research data obtained directly from the source in the form of interviews, polls from individuals or groups (people) as well as the results of observations of an object, event, or test result (object). The primary data in this study were sourced from respondents or members of the Pala City KWT through direct interviews with farmers using questionnaires or a list of questions that had been prepared.
2. Secondary data is a source of research data obtained through intermediary media or indirectly in the form of books, records, existing evidence, or archives, both published and unpublished in general. For example, literature, articles, journals, agricultural services, as well as the results of previous studies related to research, books that support research, information obtained through internet media, and so on.

2.1 Determination of Respondents

The study's population was determined by *purposive sampling*. The population in this study was KWT Pala City, Dajan Peken Village. The technique of determining or taking samples in this

study was carried out by the census method. It was carried out on 20 members of KWT Pala City, Dajan Peken Village.

2.2 Method of collecting data

Data collection methods in this study were carried out following methods: 1) Observation, 2) Interview, 3) Questionnaire, and 4) Documentation.

2.3 Data analysis method

The analytical method used in this research is quantitative analysis, which is as follows:

a. Farming Income Analysis

1. The total cost can be calculated using the following formula:

$$TC = FC + VC \tag{1}$$

Information:

TC = Total Cost (Rp)

FC = Fixed Cost (Rp)

VC = Variable Cost (Rp)

2. To calculate the amount of revenue obtained can be known by using the following formula:

$$TR = P \times Q \tag{2}$$

Information :

TR = Total revenue (Rp)

P = Product Price (Rp)

Q = Number of Products or Quantity (Kg)

3. To calculate the income of vegetable farming mathematically the equation is written using the following formula:

$$Pd = TR - TC \tag{3}$$

Information :

Pd = Farming income (Rp)

TR = Total Revenue (Rp)

TC = Total Cost (Rp)

b. Efficiency Analysis

To determine the R/C of a farm, it can be formulated as follows:

$$R/C = TR/TC \tag{4}$$

Information:

R/C = Return Cost Ratio

TR = Total Revenue

TC = Total Cost

making criteria:

a. RC > 1, profitable/efficient farming is cultivated

b. RC = 1, Farming is said to be neither profitable nor loss (*break event)*

RC < 1, Farming is not profitable/efficiently cultivated

3. Results and Discussion

3.1 Characteristics of Respondents

a. Respondent Age

Most of the sample farmers in KWT Pala City, Dajan Peken Village are aged 15-65 years with a percentage of 100%. This statement shows that most of the sample farmers are of very productive age, and indicates that the farming activities carried out are in the productive age group. It can be assumed that the more productive a farmer is, the higher the potential for energy possessed by the respondents in cultivating farming.

b. Education

10 Farmers at KWT Pala City, Dajan Peken Village took formal education at the elementary level. 8 people had Junior Highschool Education, a person came from Senior Highschool Education, and one person had a bachelor's degree. Education can be described as one of the important things in farming because it is very influential on the mindset of a farmer.

c. Number of Family Members

Farmers at KWT Pala City, Dajan Peken Village have family members totaling 3-5 people as many as 16 people with a percentage of 80.00%. And family members numbering less than 3 people as many as 4 people with a percentage of 20.00%.

d. Land area

17 Farmers at KWT Pala City, Dajan Peken Village have 10-25 acres of land area for farming. Meanwhile, another three farmers have a land area of fewer than 10 acres. Each member in the Pala City KWT, Dajan Peken Village has different areas of agricultural land. The land itself is managed by the private property group (group members).

e. Vegetable Farming Income

Farming Fee

According to Soekartawi (1995), farming costs are all expenses used in farming. Farming costs are divided into two, namely fixed costs and variable costs (variable costs). Fixed costs are costs whose amount does not depend on the size of the production to be produced. on other hand, variable costs are costs whose size is influenced by the volume of production.

1. Fixed cost

Fixed costs are costs whose amount does not depend on the size of the production to be produced. This type amount cost is relatively fixed and continues to be issued even though the level of farm production is either high or low (Soekartawi, 1995). The following are fixed costs in vegetable farming in KWT Pala City, Dajan Peken Village :

Table 1
Fixed Cost of Beans

No	Goods	Price (IDR)	Amount	Total price (IDR)	Lifespan (months)	Residual value (IDR)	Shrinkage (IDR)
1	Hoe	75.000	10	750.000	60	12,500	49.167
2	Sickle	35.000	8	280.000	60	4.667	18.356
3	Plastic Bucket	25.000	10	250.000	60	4.167	16.389
4	Cart (artco)	400.000	6	2.400.000	60	40.000	157.333
5	Watering Tool	350.000	6	2.100.000	60	35.000	137.667
	Total						378.911

Source: Primary Data Analysis 2022

Table 2
Fixed Costs of Mustard Vegetables

No	Goods	Price (IDR)	Amount	Total price (IDR)	Lifetime (month)	Residual value (IDR)	Shrinkage (IDR)
1	Hoe	75.000	10	750.000	60	12.500	49.167
2	Sickle	35.000	8	280.000	60	4.667	18.356
3	Harvest basket	25.000	12	300.000	60	5.000	19.667
4	Cart (artco)	400.000	6	2.400.000	60	40.000	157.333
5	Watering Tool	350.000	6	2.100.000	60	35.000	137.667
	Total						382.189

Source: Primary Data Analysis 2022

Table 3
Fixed Costs of Cabbage Vegetables

No	Goods	Price (IDR)	Amount	Total price (IDR)	Lifetime (month)	Residual value (IDR)	Shrinkage (IDR)
1	Hoe	75.000	12	900.000	60	15.000	59.000
2	Sickle	35.000	10	350.000	60	5.833	22.944
3	Harvest basket	25.000	16	400.000	60	6.667	26.222
4	Cart (artco)	400.000	8	3.200.000	60	53.333	209.778
5	Watering Tool	350.000	8	2.800.000	60	46.667	183.556
				Total			501.500

Source: Primary Data Analysis 2022

The table above explains that the total fixed cost of bean vegetable commodities is Rp. 378,911, the total fixed cost of the mustard vegetable commodities is Rp. 382,189, and the total fixed cost of cabbage vegetable commodity is Rp. 501. 500. The highest fixed costs are cabbage vegetables, because most of the members of KWT Pala City, Dajan Peken Village manage cabbage commodities so the total fixed cost is higher than other vegetable commodities.

2. Variable Cost

Variable costs (variable costs) are costs whose size is influenced by the volume of production Soekartawi (1995). The variable costs in this study are the use of fertilizers, seeds, pesticides, labor, and transportation. The following are the variable costs in vegetable farming in KWT Pala City, Dajan Peken Village.

Table 4
Variable Costs of Beans

No	Ingredient	Price	Amount	Total
1	Phonska Fertilizer	IDR 115.000	10	IDR 1.150.000
2	Bean Seeds	IDR 45.000	10	IDR 450.000
3	Matador Insecticide	IDR 65.000	8	IDR 520.000
4	Labor costs	IDR 75.000	24	IDR 1.800.000
5	Transportation	IDR 100.000	6	IDR 600.000
	Total			IDR 4.520.000

Source: Primary Data Analysis 2022

Table 5
Variable Costs of Mustard Vegetables

No	Ingredient	Price	Amount	Total
1	Phonska Fertilizer	IDR 115.000	10	IDR 1.150.000
2	Mustard Seeds	IDR 200	6000	IDR 1.200.000
3	Matador Insecticide	IDR 65.000	7	IDR 455.000
4	Labor costs	IDR 75.000	24	IDR 1.800.000
5	Transportation	IDR 100.000	6	IDR 600.000
	Total			IDR 5.205.000

Source: Primary Data Analysis 2021

Table 6
Variable Costs of Cabbage Vegetables

No	Ingredient	Price	Amount	Total
1	Phonska Fertilizer	IDR 115.000	13	IDR 1.495.000
2	Cabbage Seeds	IDR 300	9000	IDR 2.700.000
3	Matador Insecticide	IDR 65.000	10	IDR 650.000
4	Labor costs	IDR 75.000	26	IDR 1.950.000
5	Transportation	IDR 100.000	8	IDR 800.000
	Total			IDR 7.595.000

Source: Primary Data Analysis 2022

Based on the table data, it is known that the total variable cost of the bean vegetable commodity is IDR 4,520,000, the total variable cost of the mustard vegetable commodity is IDR 5,205,000, and the total variable cost of the cabbage vegetable commodity is IDR 7,595,000. Therefore, the lowest total variable cost is the commodity of beans, and the highest is the commodity of cabbage.

3. *Total cost*

Total costs are costs incurred by farmers after the fixed costs are added up with variable costs. By adding up both types of costs, the researcher will find the total costs.

Table 7
Total Cost of Vegetable Farming

No	Commodity Name	Total cost
1	Green Beans	IDR 4.898.911
2	Vegetable mustard	IDR 5.587.189
3	Cabbage	IDR 8.096.500
	Amount	IDR 18.582.600

Source: Primary Data Analysis 202Based on the data above, Table 7 shows that the total cost of vegetable farming in KWT Pala City, Dajan Peken Village is about IDR 18.582.600.

Vegetable Farming Acceptance

Acceptance is the result of multiplying the production results that have been produced during the production process with the selling price of the product (Ambarsari, 2014).

Table 8
Revenue from Vegetable Farming

No	Commodity Name	Total Receipt
1	Green Beans	IDR 7.200.000
2	Vegetable mustard	IDR 14.400.000
3	Cabbage	IDR 19.000.000
	Amount	IDR 40.600.000

Source: Primary Data Analysis 2022

Based on the table above, it is known that the total revenue from vegetable farming in KWT Pala City, Dajan Peken Village, is about IDR 40.600.000. The Cabbage vegetable community becomes the highest revenue according to the data. It came from the fact that most of the members in the KWT Pala City, Dajan Peken Village are farming cabbage.

Vegetable Farming Income

Vegetable farming income is the difference between revenue and total costs incurred by farmers in conducting farming activities.

Table 9
Farming Income

No	Commodity Name	Total income
1	Green Beans	IDR 2.301.089
2	Vegetable mustard	IDR 8.812.811
3	Cabbage	IDR 10.903.000
	Amount	IDR 22.016.900

Source: Primary Data Analysis 2022

Based on the table above, it can be seen that the total income of vegetable farming in KWT Pala City, Dajan Peken Village is IDR 22,016,900. The total income is obtained from the sum of the income of the bean vegetable commodity, the income of the mustard vegetable commodity, and the income of the cabbage vegetable commodity.

Vegetable Farming Efficiency

To determine whether a farm is efficient or not can be seen from the relative advantage of vegetable farming which is calculated using the R/C ratio analysis formula. The following is data on the efficiency of vegetable farming in KWT Pala City, Dajan Peken Village:

Table 10

No	Commodity Name	Reception	Total cost	R/C Ratio
1	Green Beans	IDR 7.200.000	IDR 4.898.911	1.47
2	Vegetable mustard	IDR 14.400.000	IDR 5.587.189	2.58
3	Cabbage	IDR 19.000.000	IDR 8.096.500	2.35
	Total number	IDR 40.600.000	IDR 18.582.600	2.18

Efficiency of Vegetable Farming
Source: Primary Data Analysis 2021

Based on the data in Table 5.14, the R/C Ratio for the commodity of green beans is 1.47, the R/C Ratio of the mustard vegetable commodity is 2.58 and the R/C Ratio of the commodity of cabbage is 2.35. So based on data analysis, it is stated that the highest R/C Ratio is mustard greens, and the lowest is green beans. Total revenue from vegetable farming in KWT Pala City, Dajan Peken Village is IDR 40.600.000, and a total cost of IDR 18.582.600. The calculation using the analytical formula of R/C Ratio is used to find the R /C Ratio of vegetable farming. The value of R/C Ratio is the ratio between revenue and total cost. In the end, the R/C Ratio of vegetable farming in KWT Pala City, Dajan Peken Village of 2.18. Because R/C Ratio > 1 means that vegetable farming activities in KWT Pala Town, Dajan Peken Village are feasible (efficient) to be developed because it is economically profitable.

KWT's Contribution to Family Income in KWT Pala City, Dajan Peken Village

As a learning class, KWT Pala City, Dajan Peken Village, has a role as a place to improve knowledge, attitudes, and skills in farming for the people. As a vehicle for cooperation, it plays a role in strengthening cooperation between fellow group members and groups with other parties. As a production unit, farmer groups play a role in providing production facilities and infrastructure, as well as marketing. Business units play a role in increasing business sustainability and earning profits.

Table 11
Contribution of Monthly Income Vegetable Farmers in KWT Pala City, Dajan Peken Village on Family Income

No	Monthly Income of Vegetable Farmers	Number of people)	Percentage %
1	< IDR 100.000	4	20.00
2	IDR 100.000 – Rp 500.000	15	75.00
3	> IDR 500.000	1	05.00
	Amount	20	100.00

Source: Primary Data Analysis 2022

Based on the data in the table above, it can be seen that 4 members of KWT contributed less than IDR 100,000 per month to family income. Meanwhile, 15 persons contribute up to IDR 100.000-Rp 500.000 per month to family income. Next, one member contributes above IDR 500.000 per month to the family income. The statement shows that vegetable farming activities are carried out by women farmers in KWT Pala City, Dajan Peken Village plays a role in vegetable farming and can contribute to family income.

4. Conclusion

Based on the results of research conducted on the income of vegetable farming in the research area, the following conclusions can be drawn:

1. Vegetable farming income in KWT Pala Town, Dajan Peken Village during one production season is IDR 22.016.900. The highest total income is obtained from farming commodities of cabbage, with a total income of about IDR 10.903.000.
2. The Value of R/C Ratio of vegetable farming in KWT Pala City, Dajan Peken Village is 2.18, and the highest R/C Ratio value is obtained from the mustard vegetable commodity with a total of 2.58.
3. Based on the data analysis that has been done, it shows that the highest contribution of monthly income vegetable farmers at KWT Pala City, Dajan Peken Village to family income is above IDR 500.000 per month.

References

[1] Anindita,A, Mardiningsih,D, Dalmiyatun,T. (2019). Peran Anggota Kelompok Wanita Tani (KWT) Mandiri dalam Perekonomian Keluarga di Kelurahan Cepoko.

[2] Aryana A, Budhi M.K, Yuliarmi N.N. (2016). Pengaruh Karakteristik Petani dan Peran Pendamping Terhadap Keberhasilan Simantri di Kabupaten Badung. *E-Jurnal Ekonomi dan Bisnis*, 5 (4), 689-720.

[3] Dampak N. 2011. Kajian Tata Niaga Karet Alam : Upaya Peningkatan Kesejahteraan Petani. *Jurnal Penelitian Karet*, 29 (1),76-92. https://doi.org/ 10.22302/jpk.v29i1.113

[4] Devi C. 2015. Analisis Pendapatan Perkebunan Karet di Kecamatan Banyuasin III Kabupaten Banyuasin. *Jurnal Bisnis dan Ekonomi*, 6 (2), 39-50.

[5] Feni,R, Mufriantie,F, Marwan,E., Fitriani,Y. (2017). Analisis Biaya Dan Pendapatan Usahatani Sayuran Di Kecamatan Ratu Agung Kota Bengkulu. Universitas Muhammadiyah Bengkulu.

[6] Findeis. (2018). Peran Kelompok Wanita Tani (KWT). Kecamatan Gunungpati Kota Semarang. Universitas Diponogoro. *Media Konservasi* , 23 (3), 281-292.

[7] Herath PH, Takeya H. 2013. Factors Determining Intercropping by Rubber Smallholders in Sri Lanka : a Logit Analysis. *Journal Agricultural Economic*, 29 (2), 159-168. https://doi.org/10.1111/j.1574-0862.2003.tb00154.x

[8] Isma. R., Fredian T.N. (2011). Partisipasi Masyarakat dan Stakeholder dalam Penyelenggaraan Program Corporate Social Responsibility (CSR) dan Dampaknya Terhadap Komunitas Perdesaan. *Jurnal Trandisiplin Sosiologi, Komunikasi, dan Ekologi Manusia*, 5 (1), 51-70.

[9] Keukama, M.F. (2017). Analisis Pendapatan Usahatani Padi Ciherang Dengan Menggunakan Sistem Tanam Legowo Jajar (2:1) (Studi Kasus di Subak Sengempel, Desa Bongkasa, Kecamatan Abiansemal, Kabupaten Badung). *E-jurnal Agribisnis dan Agrowisata*, 6 (1).

[10] Lampaga, A. (2015). Analisis Produksi dan Pendapatan Usahatani Padi Sawah di Desa Sidondo 1 Kecamatan Sigi Biromaru Kabupaten Sigi. *Jurnal Agroland*, 22 (2),147 – 153.

[11] Mahabirama, A.K (2011). Analisis Efisiensi dan Pendapatan Usahatani Kedelai di Kabupaten Garut Provinsi Jawa Barat. Fakultas Ekonomi dan Manajemen Institut Pertanian Bogor.

[12] Mukti,B.Y. (2020). Peranan Subak Terhadap Penigkatan Pendapatan Padi Sawah (Kasus: di Subak Penarungan Kecamatan Mengwi Kabupaten Badung). Universitas Mahasaraswati Denpasar

[13] Nugraha I.S, Alamsyah,A;Agustina,D.S, Syarifa,L.F.(2016). Faktor-Faktor Penentu yang Memengaruhi Petani Menanam Tanaman Sela di Antara Karet di Sumatera Selatan. *Jurnal Penelitian Karet*, 4 (1),77-88. https://doi.org/10.22302/jpk.v0i0.217

[14] Pribadi,P.T, Setiawan, Isyanto, A.Y. (2021). Peran Kelompok Wanita Tani Dalam Pemberdayaan Ekonomi Masyarakat (Studi Kasus Pada Kelompok Wanita Tani Puncaksari di Desa Binangun Kecamatan Petaruman Kota Banjar). Universitas Galuh.

[15] Puspasari, S. L, Hardjomidjojo, H., Sarma, M. (2013). Strategi Pengembangan Agribisnis Kentang Berbasis Sumber Daya Manajemen di Kabupaten Banjarnegara. *MANAJEMEN IKM: Jurnal Manajemen Pengembangan Industri Kecil Menengah*, 8 (2), 190–198.

[16] Rejeki,F.S. (2018). Peran Kelompok Wanita Tani (KWT) Ngudi Rejeki Dalam Meningkatkan Pendapatan Anggota Kelompok. Sekolah Tinggi Pembangunan Masyarakat Desa.

[17] Rohman, A.F, Sarjana, I.D.G.R dan Anggreni, I.G.A.A. (2020). Pemanfaatan Inovasi Burung Hantu (*Tyto Alba*) sebagai Pengendali Hama Tikus (*Rattus Argentiventer*) oleh Anggota Subak di Desa Senganan Kecamatan Penebel Kabupaten Tabanan. *Jurnal Agribisnis dan Agrowisata*. 9 (1).

[18] Saragih,E.C. (2021). Analisis Pendapatan Usahatani Sayuran Di Kelurahan Lambanapu Kecamatan Kambera Kabupaten Sumba Timur. Universitas Kristen Wira Wacana Sumba.

[19] Saragih, E.C dan K. Saleh. (2016). Faktor-faktor Yang Mempengaruhi Pendapatan Rumah Tangga Tani Padi (Studi Kasus; Debiroasa Sei Buluh Kecamatan Teluk Mengkudu Kabupaten Deli Serdang). *Jurnal Agrica*, 9 (2).

[20] Sarno dan Prabowo,Y.H. (2020). Analisi Peran Kelompok Wanita Tani Dalam Pengembangan Usahatani Singkong Sebagai Upaya Peningkatan Pendapatan Keluarga di Desa Majalengka Banjarnegara. Universitas Wahid hasyim Semarang.

[21] Sari D.K, Haryono D, Rosanti ,N. (2014). Analisis Pendapatan dan Tingkat Kesejahteraan Rumah Tangga Petani Jagung di Kecamatan Natar Kabupaten Lampung Selatan. *Jurnal Ilmu Ilmu Agribisnis*. 2 (1), 64-70.

[22] Soekartawi. (1995). Analisis Usaha Tani. Jakarta (ID): Universitas Indonesia.

[23] Suharyanto, Rinaldy, J., Arya, N. N. (2015). Analisis Risiko Produksi Usahatani Padi Sawah di Provinsi Bali. *AGRARIS: Journal of Agribusiness and Rural Development Research*, 1 (2), 70–77.

[24] Tirta,J. (2020). Peranan Kelompok Wanita Tani Terhadap Peningkatan Pendapatan Anggota Kelompok Wanita Tani (Studi Kasus: Desa Kebun Kelapa Kecamatan Secanggang Kabupaten Langkat). Universitas Muhamadiyah Sumatera Utara.

[25] Tridiati., A.A; Pratama dan Abdulrachman. (2012). Pertumbuhan Dan Efisiensi Penggunaan Nitrogen Pada Padi (oryza sativa l.) Dengan Pemberian Pupuk Urea Yang Berbeda. *Buletin Anatomi dan Fisiologi*, 20 (2), 1-14.