



Contribution of Women's Working Time on Vegetable Crops to Family Income in Ogan Komering Ulu District

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ABSTRACT

The purpose of this study was to analyze the income of female farmers on family income in Ogan Komering Ulu Regency. The method used in this study is the survey method. The sampling method in this study was carried out in proportion randomly with a sample of 18 female farmers. The results obtained explained that the outpouring of women's work time <0.40 HOK with the number of respondents as many as 28 people (15.56%), 0.41-0.50 HOK (labor working day) as many as 38 people (21.11%), 0.61-0.70 HOK as many as 88 people (48.89%) and 0.71-0.80 HOK as many as 26 people (14.44%). Based on the outpouring of women's working time in Ogan Komering Ulu Regency is 0.61-0.70 HOK with a total of 8 respondents (48.89%). The contribution of women farmers to family income in Semidan Aji District is 25.94%. The contribution of women farmers to family income in Sosoh Bua Rayap District was 25.67% and the contribution of female farmers to family income in Lubu Raja District was 26.62%. Then the contribution of women farmers to family income is the highest contribution of women's income in Lubuk Raja District at 26.62%. The contribution of women farming vegetable crops to family income in Ogan Komering Ulu Regency was 26.08%. This shows that more than a quarter of the income of peasant families comes from female farmers. So women farmers contribute quite a lot to the total income of the farmer family. The income is used to meet the needs of the family such as daily food expense, school fees for children, and so on.

1. INTRODUCTION

1.1. Research Background

The agriculture sector in Indonesia has played an important role in the country's economy. During the economic crisis, only the agriculture sector was able to survive and still grow. In the recovery period after the crisis, agriculture also played a role in economic growth. In the period 2000 and 2002, out of nine sectors, only four sectors showed growth, namely agriculture, mining, transportation services, and finance. Food crop agriculture also has a strategic meaning in national agriculture because this sub-sector provides the most essential needs for life, namely food, and currently supports the lives of more than 63% of Indonesian people [1].

Handling agriculture problems in Indonesia requires support from various parties such as the government as a contributor to funds for agriculture activities, the community as a transmitter of appropriate information in land management, and the participation of farmers in receiving and applying information and agriculture sciences that have been obtained in agriculture activities. One of the government programs for the welfare of

farmers is the Women Farmers Group (KWT) program. The purpose of the establishment of the Women Farmers Group (KWT) is to further improve and develop the capabilities of farmers and their families as subjects of agriculture development through a group approach so that they play a greater role in development [2].

By creating a forum/organization for Indonesian women and having outlined the forms of women's roles in development, the government thus hopes that the role of Indonesian women in development can increase. Women not only play a role as housewives in the agricultural world, but many women play a role or make a real contribution to the business run by their families. About 50 percent of women farmers besides working at home as housewives, also work in the fields or the fields and even open their jobs by joining the Women Farmers Group (KWT). This is done because they hope that with the role or involvement of women farmers, the business productivity will increase. The Women Farmers Group (KWT) is one of the strategies in establishing a farming organization as a form of empowerment, as a community institution that develops rural community farming and community development for poverty alleviation to achieve a better standard of living [3]

Women play an important role as housewives with various types of work from heavy to light, such as managing the household, cooking, washing, caring for, and educating children. However, in line with technological developments in the agricultural sector, women farmers need to improve their knowledge, and skills so that they can take the maximum benefit from all types of resources around them in the form of natural resources and human resources. Therefore, the progress achieved by women today can be found in many women as a driving force for development in agriculture, such as farmer groups, agricultural production improvement program activities, and post-harvest activities for agricultural production. This includes household workloads such as fetching water, looking for firewood, cooking, selling crops, educating their children, being a housewife, and serving their husbands [4].

The role of women in agriculture is included in food security and family nutrition. Food security can develop institutions and food business management for women farmers, so that women must be good at managing, managing relatively low incomes to meet family needs, especially food and clothing. Operationally, a prosperous family is a family that can carry out family functions, so to create a prosperous family, efforts need to be made to revive and develop these family functions [4].

1.2. Research Objective

The purpose of this application is to help "Karang Ayu" partners in terms of overcoming problems faced related to the processing of livestock manure into organic fertilizer. From the problems that have been identified, the solution to the problem solutions offered: (1) establishment and design of Bali cattle rearing management; (2) Preparation of work plans and cow dung storage; (3) process of dung into organic fertilizer; (4) The use of some damaged equipment such as sickles, baskets, shovels, and buckets, and barrels for fermentation of cow dung.

2. MATERIALS AND METHOD

Based on the identification of problems faced by partners and the solutions offered, the method of implementing activities: (1) Providing assistance and consultation on good and correct Bali cattle rearing management to increase Bali cattle production; (2) Help and practice how to make organic fertilizer using EM4 fermenters; (3) Procurement of tools in the form of sickles, hoes, scops, and barrels; (4) Counseling and assistance during the process of making organic fertilizers.

3. RESULTS AND DISCUSSION

3.1. General Condition of the Region

The area of Ogan Komering Ulu District consists of 13 sub-districts, with the area of each sub-district, namely Lengkiti (512.93 km²), Sosoh Buay Rayap (385.30 km²), Pengandonan (543.61 km²), Semidang Aji (707.86 km²), Muara Jaya (26.32 km²), Ulu Ogan (597.37 km²), Peninjauan (725.92 km²), Lubuk Batang (724.81 km²), Sinar Peninjauan (84.94 km²), Kedaton Peninjauan Raya (183.31 km²), East Baturaja (110.22 km²), Lubuk Raja (69.42 km²) and West Baturaja (125.05 km²).

Ogan Komering Ulu District is located between 103° 40' East Longitude to 104° 33' East Longitude and between 3° 45' to 4° 55' South Latitude. The area of Ogan Komering Ulu District is in

the form of a land area of 4,797.06 km² with an average height of 100 meters above sea level. Based on the elevation (height above sea level) the plains in Ogan Komering Ulu District consist of, 0 – 100 m = 53.84%, 80 – 500 m = 7.69%, 100 – 500 m = 30.78% and 500 – 1000 m = 7.69%.

The contours of the earth in Ogan Komering Ulu District are quite varied between flat and hilly zones. Ogan Komering Ulu District has a tropical climate and moderate temperature with an average rainfall below 3000 mm per year and rainy days below 150 days per year. Such natural and climatic conditions provide good support for the development of the agricultural sector in the Ogan Komering Ulu District.

The northern part of Ogan Komering Ulu District is bordered by Muara Enim District and Ogan Ilir District, the southern part is bordered by South Ogan Komering Ulu District, and the eastern part is bordered by East Ogan Komering Ulu District, and the western part is bordered by Muara Enim District.

3.2. Characteristics of Respondents

The characteristics of the female farmer respondents are a general description of the respondent's background that can affect the contribution of female farmer workers to the workforce. 180 women farmers were selected as respondents who tried to grow vegetable crops. These respondents were randomly selected proportionally in the Districts of Lubuk Raja, Semidang Aji, and Sosoh Buay Rayap, with a total sample of 60 people in each sub-district. The identity of the respondents taken includes age, education level, and the area of the vegetable farming business area.

3.2.1. Characteristics of Respondents Based on Age

The age of the respondent is the age of the female farmer who was obtained when the questionnaire data was collected and expressed in years. The age of the farmer is related to the experience and maturity of the farmer in farming. The age characteristics of respondents in Lubuk Raja, Semidang Aji, and Sosoh Buay Rayap Subdistricts, Ogan Komering Ulu District can be seen in Table 1.

Table 1 Characteristics of Respondents Based on Age

No.	Age (years)	Number of respondents (people)	Percentage (%)
1.	16 – 25	20	11.12
2.	26 – 40	85	47.22
3.	41 – 55	40	22.22
4.	> 55	35	19.44
Total		180	100.00

Based on Table 1, the age of the women farmers in the vegetable crop commodity above is still in their productive age. Farmers who are in their productive age have great energy, strength, and enthusiasm for farming. Respondents in this study based on the age of 16-25 years as many as 20 people (11.12%), age 26-40 years as many as 85 people (47.22%), age 41-55 years as many as 40 people (22.22%) and age >55 years 19.44%. Based on age the highest percentage is aged 26-40 years as many as 85 people with a percentage of 47.22%.

3.2.2. Characteristics of Respondents Based on Education Level

Characteristics of respondents based on the level of education are the formal education taken by the respondent. Formal education is calculated is the respondent completes education according to the level of education he has passed. The level of education is classified according to the applicable formal education, namely SD (elementary school), SMP (junior high school), SMA (senior high school), and Universities. This level of formal education is one of the characteristics of women farmers who influence the process of making a decision, either in farming or otherwise. Characteristics of Respondents Based on Education Level can be seen in Table 2.

Table 2. Characteristics of Respondents Based on Education Level

No.	Level of Education	Number of Respondents (People)	Percentage (%)
1.	SD	5	2.78
2.	SMP	22	12.22
3.	SMA	150	83.33
4.	University of Graduates	3	1.67
Total		180	100.00

Based on Table 2 the education level of the female farmer respondents in this study based the education level of elementary school as many as 5 people (2.78%), junior high school as many as 22 people (12.22%), high school as many as 150 people (83.33%) and college as many as 3 people (1.67%). Based on the level of education, the highest percentage is high school graduates reaching 150 people (83.33%). The smallest percentage is at the education level of University of graduates with 3 respondents (1.67%).

3.2.3. Characteristics of Respondents Based on Area of Vegetable Farming

Characteristics of respondents based on the area of land for vegetable farming is the amount of land used by women farmers to cultivate vegetables. The type of vegetable farming that is generally carried out in the research area is the cultivation of long beans, shallots, red chilies, and eggplants. Characteristics of respondents based on the area of the vegetable farming business can be seen in Table 3 as follows:

Table 3 Characteristics of Respondents Based on Area of Vegetable Farming

No.	Land Area (Ha)	Number of Respondents (people)	Percentage (%)
1.	< 0.1	30	16.67
2.	0.1 – 0.2	50	27.78
3.	0.2 – 0.3	80	44.44
4.	0.3 – 0.4	20	11.11
Total		180	100.00

Based on Table 3, the land area owned by more respondents is 0.2 – 0.3 Ha as many as 80 respondents. This land area is

relatively small for the size of the farm but sufficient for the area managed by women farmers. Respondents based on vegetable farming land area <0.1 ha for as many as 30 people (16.67 %), land area 0.1-0.2 ha for as many as 50 people (27.78 %), land area 0.2- 0.3 ha for as many as 80 people (44.44%) and a land area of 0.3-0.4 ha as many as 20 people (11.11%). Based on the area of land owned, the highest percentage is the land area of 0.2-0.3 ha for as many as 80 people (44.44%).

3.3. Analysis of Working Time of Women Farmers

The working time of women farmers is the number of hours worked by women farmers on vegetable crops. The number of working hours will be converted into Farmer Working Day (HOK), which is equivalent to 8 hours of work per day. The working time of this female farmer depends a lot on socio-economic factors and family circumstances. The activities of women farmers in vegetable farming include planting seeds, maintaining, and harvesting. The working time of women farmers in Ogan Komering Ulu District can be seen in Table 4.

Table 4. Working Time of Women Farmers in Ogan Komering Ulu District

No.	Farmer Working Day (HOK)	Number of Respondents (people)	Percentage (%)
1.	< 0.40	28	15.56
2.	0.41 – 0.50	38	21.11
3.	0.51 – 0.60	0	00.00
4.	0.61 – 0.70	88	48.89
5.	0.71 – 0.80	26	14.44
Total		180	100.00

Based on Table 4.4 above, the working time of women farmers is <0.40 HOK with the number of respondents being 28 people (15.56%), 0.41-0.50 HOK as many as 38 people (21.11%), 0.61- 0.70 HOK as many as 88 people (48.89%) and 0.71-0.80 HOK as many as 26 people (14.44%). The working time of women farmers in Ogan Komering Ulu District is 0.61 – 0.70 Farmers Working Days (HOK) with 88 respondents or 48.89%. This amount of working time is almost close to one HOK and in addition, there are 26 respondents, or 14.44% whose working time is in the range of 0.71 – 0.80 HOK. This shows that women farmers work for almost one HOK.'

The working time of women farmers in vegetable farming shows that women also play an active role in farming and are carried out to help the family economy and the women farmers do not only act as additional breadwinners but are also the main source of income because their income is to meet family needs and to improve the socio-economic life of the family [5,6,7,8,9,10, 11].

3.4. Analysis of the Income Contribution of Women Farmers to Family Income

The contribution referred to in this study is the contribution of women's income from farming activities to vegetable commodities to the total income of women's farming families. Here first, the contribution of women's working time to family income in vegetable farming is calculated, namely by dividing the outpouring of women's work on vegetable farming by the total days of family work time devoted to farming activities multiplied by the total income received in farming.

$$KPWU = \frac{CWKU}{THKU} \times PUT$$

where :

KPWU = Women Farmer Income Contribution to Vegetable Farming Business (IDR)

CWKU = Working Time of Farmer Women in Vegetable Farming Business (HOK)

THKU = Total Working Days on Farming (HOK)

PUT = Farming Income (IDR)

The results of the analysis through the MS application. Excel on the contribution of women's income to vegetable farming in Ogan Komering Ulu District can be seen in Table 5.

Table 5. Contribution of Farmer Women's Income to Vegetable Farming Business in Ogan Komering Ulu District

No.	Subdistrict	Farmer Working Day (HOK)	Total Farmer Working Day (HOK)	Farm Income (IDR)	Income Contribution of Women in Farming (IDR)
1	2	3	4	5	6 = 3/4 x 5
1.	Semidang Aji	34.25	76.25	159,700,000	72.481.162
2.	Sosoh Buay Rayap	34.63	75.88	152,450,000	69.916.212
3.	Lubuk Raja	35.12	75.38	157,950,000	73.982.374
	Total	104	227.50	470.,100.,000	216,379,747

Based on Table 5, the contribution of women's income to vegetable farming in Semidang Aji Subdistrict is IDR. 72,481,162. The income of women farmers in Sosoh Buay Rayap Subdistrict is IDR. 69,916,212 while the income of women farmers in Lubuk Raja Subdistrict is IDR. 73,982,374. So the income of the most female farmers is in Lubuk Raja Subdistrict, which is IDR. 73,982,374. Vegetable crops that are cultivated in Lubuk Raja Subdistrict are eggplant and chili. These commodities affect the income of women farmers.

After getting the value of women's income in vegetable farming, the contribution of women's working time to family income is calculated using the formula:

$$KWT = \frac{KPWU}{TPK} \times 100\%$$

TPK

KWT = Contribution of Women Farmers to Family Income (%)

KPWU = Women Farmer Income Contribution to Vegetable Farming Business (IDR)

TPK = Total Family Income (IDR)

The results of the analysis through the MS application. Excel regarding the contribution of women farming vegetable crops to family income can be seen in Table 6.

Table 6. The Contribution of Women Farmers to Family Income in Ogan Komering Ulu District

No.	Subdistricts	Farmer women's income (IDR)	Family Income (IDR)	Contribution (%)
1.	Semidang Aji	72,481,162	279,392,000	25.94
2.	Sosoh Buay Rayap	69,916,212	272,390,000	25.67
3.	Lubuk Raja	73,982,374	277,890,000	26.62
	Total	216,379,747	829,672,000	78.23
	Average	72,126,582	276,557,333	26.08

Based on Table 6, the contribution of women farmers to family income in Semidang Aji Subdistrict is 25.94%. The contribution of women farmers to family income in Sosoh Buay Rayap Subdistrict is 25.67% and the contribution of women farmers to family income in Lubuk Raja Subdistrict is 26.62%. So the contribution of women farmers to family income is the highest in Lubuk Raja Subdistrict, which is 26.62%. From the description above, the contribution of women farming vegetable crops to family income is 26.08%. This shows that more than a quarter of the income of farming families comes from women farmers. So women farmers contribute quite a lot to the total family income. This income is used by farmers to meet family needs, such as the cost of daily meals, children's school fees, and so on.

4. CONCLUSION

Based on the research that has been done, it can be concluded that the working time of women farmers in farming vegetable commodities in Ogan Komering Ulu District is mostly 0.61 – 0.70 working days (HOK) with 88 respondents or 48.89% and the contribution of women farmers to vegetable crops to family income in Ogan Komering Ulu District is 26.08% with the highest contribution being the income contribution of women farmers in Lubuk Raja Subdistrict. Suggestions that can be given from the results of the study are that the outpouring of working time for women farmers needs to be optimized again so that they can contribute more to family income.

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