## THE WORK TIME SPENT BY FEMALE RABBIT BREEDERS AND ITS' INFLUENTIAL FACTORS

# (Curahan Waktu Wanita Peternak dan Factor-Faktor yang Mempengaruhinya dalam Beternak Kelinci)

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#### **ABSTRACT**

The aim of this research was to find out the work time spent by female rabbit breeders and factors influencing the work time spent to raise rabbits in Soppeng, South Sulawesi. The research used survey method with female rabbit breeders as analysis unit. Population of 356 female rabbit breeders in Soppeng was used and a sample of 78 female rabbit breeders were selected by region. The result of the research showed that average work time of female rabbit breeders was 3.044 hours per day, which was spent cleaning cages and equipment, preparing feedstuffs and feeding on rabbits, assisting bunnies breastfeed to their mother and health care. The F-test results reveal that the most significantly influential factors affecting female rabbit breeders work time was household income, number of dependents, rabbit breeding income, and the level of experience in breeding rabbits.

Key words: work time outpouring, female breeders, rabbits, factor influenced

#### **ABSTRAK**

Penelitian ini bertujuan untuk mengetahui curahan waktu wanita peternak dan factor-faktor yang mempengaruhinya dalam beternak kelinci di Kabupaten Soppeng, Propinsi Sulawesi Selatan. Metode penelitian yang digunakan adalah metode survai dengan unit analisis wanita peternak kelinci. Populasi adalah semua wanita peternak kelinci yang bejumlah 356 orang di Kabupaten Soppeng dan sampel adalah wanita peternak kelinci di Kabupaten Soppeng yang ditarik berdasarkan wilayah berjumlah 78 orang. Hasil penelitian menunjukkan rata-rata curahan waktu wanita dalam berusaha ternak kelinci adalah 3,044 jam/hari yang meliputi pembersihan kandang dan peralatan, pengambilan bahan pakan dan pemberian pada kelinci, membantu anak kelinci menyusui pada induknya serta penanganan kesehatan. Dari hasil uji F diperoleh pendapatan rumah tangga, jumlah tanggungan keluarga, penerimaan usaha ternak kelinci, jumlah ternak kelinci serta pengalaman beternak kelinci berpengaruh signifikan terhadap curahan waktu wanita peternak kelinci

Kata kunci: Curahan waktu, Wanita peternak, Kelinci, Faktor, Pengaruh

#### **INTRODUCTION**

Scale of farm business need to be pushed to more economic way in the future so it can improve people's income in general and breeders in particular. Enhancement of business scale is one of preconditions to reach scale of livestock industry in the global competition. To improve business scale, Indonesian labor factor including unlimited production factor compared another factor which is easily obtained but with low wage and skill.

Women with so many daily working activities whether it is planned or not. Basically it has economic value especially when it is related to the income in the effort to help family. Role of women is especially to add a living in order to improve family welfare. Therefore, higher community support is necessary to the expanding work opportunity for women especially in village (Yunilas, 2005). Efficiency of utilization female labor can be reached if the selection business branches in accordance with the labors ability (Saleh and Yunilas, 2004)

In Indonesia, rabbit livestock has competitive ability to sources with the other meat sources to meet human nutritional needs and alternative meat supplier that can be considered in the future. Rabbit meat is one of quality meat and good to be consumed by people, but breeding rabbits has not developed yet compared to another breeding business. It is because of lack of public knowledge about economic value or what kind of product which can be made by rabbit breeding.

One of area that develop rabbit breeding in South Sulawesi is Salokaraja, Soppeng with 2.051 population of rabbits. Improving business scale to reach economic value in order to increase public welfare and used as local revenue. However, process of livestock is still traditional, using amateur labors includes women and the low incoming income. Mubyarto (1987) said that household or family consists of man and woman, adult and children. Usually, family labors who get involved in livestock household scale consists of father, mother, and children. Therefore, phenomenon of increasing of female labor participation in outpouring time to breed rabbit is quite important to the family welfare.

Work time outpouring is use of work time used by women to manage livestock business. Working hours outpouring in livestock is affected by various factors: breeders' age, livestock experience, number of family member, education level, occupation outside the farm, family income, skill and technology mastery, number of stock etc. (Yunilas, 2005). According to Mastiti and Hidayat (2008), the age of female breeder, last child's age and business management becomes limiting factor to outpouring work time female breeder.

#### **METHODS**

The research is done on February till March 2012 in Soppeng, South Sulawesi. Type of the research is explanation. The data is taken by using primary data; household income, number of dependent, rabbit livestock income, number of rabbits, and livestock experience. Secondary data related to the research. Data analysis used is multiple linear regression.

#### **RESULT AND DISCUSSIONS**

### General situation of respondents

Average of female breeders age are 43,38 years old. This age is in productive age in rabbit livestock business, means female rabbit breeders who are in productive age can to work harder and better than non-productive people under 14 years old and over 57 years.

In general, levels of female breeders are elementary graduates which are considered low. It is similar as Sajogyo (1983) said that levels of rural women education lower in general lower than men.

Female raising experience is about 1-13 years (average 5,17 years), it shows that rabbit livestock business has been done by most people especially housewives, as Yulinas (2005) said that raising experience also supporting in livestock business because with considerable experience, breeder will know the problems in developing their business and can compare it by using methods from instructor.

Number of dependents are about 1-7 people (average 3 people), this situation shows that family members can affect labors in doing productive activity such as raising rabbits. Because the increasing of family members who will be managed so work time outpouring of female will decrease because of household chores.

Number of cattles are about 5 – 575 rabbits, it shows that livestock business which is done by most people become household business seen from scale of the low ownership.

Household income is about IDR500.000 – 3.000.000 (average IDR1.600.000 per month) consists of rabbit livestock income (average IDR1.200.000) and farm income (average IDR2.000.000 per month). Income from rabbit livestock tend to be lower that farm income. Frequency of income in rabbit livestock faster only around 2-3 weeks compared to income of farm business which takes longer time due to the cultivation period only once for 4 to 6 months.

## Work time outpouring of female rabbit breeders

Work time outpouring of female labors is length of time which is spent by women in raising rabbits traditionally and simply. Yard is still used to plant forage as animal feed especially water spinach and sweet potato.

Work time spent female rabbit breeders averaged is 3.044 hours/day covers cleaning cage and equipment, feeding the animal, assisting bunnies to breastfeed and medical treatment (vaccine and medicine). The most outpouring time is assisting bunnies to breastfeed takes 0.98 hours/day. Rabbits habit to dig hole when giving birth required breeder to separate bunny with its mother and placed in a special place while its mother stays in the cage. In the morning and afternoon, mother breastfeed its baby bunny. The female breeders have to spend their time to look after the baby bunny while its mother is breastfeeding and put the baby back to the place after breastfeeding process done. For household chores, women spend 7.30 hours/day to do the chores such as cleaning, cooking, washing, caring of children and family.

#### Factors influenced outpouring time of female rabbit breeders

In rabbits cattle, female social economic factor affects number of working time which is spent in rabbit livestock. Social economic factor that influences female work time is various. However, as observing variable used in the research is household income, number of dependents, rabbit livestock income, number of rabbits, experience in raising rabbits.

The outpouring variation caused by women in spending their time to work influenced by income in their family. As Mustafa (2005) said that work time outpouring of female is influenced by family income, if the income is low, so women as wife can work in order to increase the family income. Moreover, Mastuti and Hidayat (2008) said that variations work outpouring influenced by working experience female breeders. The longer they do ti the more knowledge they expected to gain so the skill to run livestock business will increase.

In raising rabbits, female social economy factors influences working hours which is spent in raising rabbits. Social economy factor which influences female working hours is vary, however as observation variable used in this research is household income, income from livestock, number of dependents, number of rabbits.

**Table 1**. Factors influence Work Time outpouring of female rabbit breeders

No	Social Economy Factors	Average
1	Household income (IDR)	1.664.872
2	Number of dependents	3,2
3	Income of breeding rabbits (IDR)	972.051
4	Number of rabbits	49,52
5	Raising rabbits experience	5,17

To know the factors which influence work time outpouring of female rabbit breeders, multiple regression analysis is done, regression equation obtained with t-statistic. From the result of multiple regression analysis obtained equation:

$$Y = 4,066-1,263.10^{-7}X_1-0,372X_2+6,756.10^{-8}X_3+0,009X_4-0,022X_5$$
 ... (1)

In Table 2, we can see each variable regression coefficient is independent and constant value so it can be formed linear regression equation as follows:

$$Y = 4,066 - 1,263.10^{-7} X_1 - 0,372 X_2 + 6,756.10^{-8} X_3 + 0,009 X_4 - 0,022 X_5$$
 (2)

Based on the equation, we obtained constant value 4,066. It shows that if household income variable (X1), number of dependents (X2), breeding rabbits income (X3), number of livestock rabbits (X4), and breeding rabbits experience (X5) constant, so work time outpouring (Y) increase 4,066 hours/day.

#### Household income

Variable regression coefficient value of household income -1,263.10-7 means that household income oppositely influences to the work time outpouring. If household income is increased IDR1.000.000/month so the work time outpouring will decrease 0, 1263/hour assuming fixed variable. It shows that if income is decreased, women tend to do other activities that can improve family income. As Mustafa (2005) said that female labors spend their time to work is influenced by family income. It is caused if the husband does not meet family needs, so the woman as a wife can help her husband to earn money by working.

Tabel 2. Recapitulation data of multiple linear regression result

Research Variable	Regression Coefficients	Correlation Coefficients (r)	r²	T Count	Sig	Ket.
Female labor working						
time.						
Household income (X1)	-1,263.E-7	-0,138	0,019	-1,186	0,239	
Number of dependents (X2)	-0,372	-0,676	0,457	-7,790	0,377	
Income of rabbit livestock (X3)	6,756.E-8	0,136	0,018	1,166	0,248	
Number of rabbits (X4)	0,009	0,733	0,537	9,156	0,000	significant
Breeding rabbits experience (X5)	-0,022	-0,102	0,010	-0,869	0,388	
F Count = 42,632 R Square = 0,7		Square = 0,756	Multiple R = 0,870			
F Table $= 4.06$	C	Constanta = 4,066	d	b = 2,00		
T Table = 3,15	S	Significant to $\alpha = 0.05$				

Correlation coefficient value (r) household income variable (X1) -0,138 shows that household income has weak and negative close relationship to work variable (Y). Coefficient determinant value ( $r^2$ ) 0,019 means that partially contribution of household income variable (X<sub>1</sub>) 1,9% to ups and downs female labor working time.

Value of variable T  $_{count}$  -1,186 and t  $_{table}$  value 3,15, because t  $_{count}$  < t  $_{table}$  (-1,186 < 3,15) so household income variable does not influence to work time outpouring female rabbit breeders in Salokaraja. Thus,  $H_o$  is accepted or  $H_1$  is rejected. It also can be seen from significant value 0,2339 >  $\alpha$  = 0,05. It happens because breeders household income in Salokaraja is sourced from agricultural, in this case rice harvest so household income depends on harvest which is done three times a year.

## Number of dependents

Variable regression coefficient value of number of dependents -0,372 means that number of dependents greatly influenced to the work time outpouring oppositely. If there is additional number of dependents, so the working time will decrease 0,372 hour assuming other variable is fixed. It happened because housewife has main task to care the household members, so the increasing of dependents will greatly influenced the working time outpouring. Kasim and Sirajuddin (2011) said that number of

dependents will influence working time housewife, the bigger the dependents the bigger the time for family chores, and less time to work as breeders for a housewife.

Correlation coefficient value (r) number of dependents variable  $(X_2)$  -0,676 shows that there is close and negative relationship to the work time outpouring (Y). Coefficient determinant value (r<sup>2</sup>) 0,457 means that partially contribution of dependent number variable  $(X_2)$  45,7 % to the ups and downs of work time outpouring of female.

T count value -7,790 and t table value 3,15, because t count < t table (-7,790 < 3,15), so the dependent number variable doesn't influence greatly to the work time outpouring female rabbit breeders in Salokaraja, therefore Ho is accepted or  $H_1$  is rejected. It can be seen from significant value 0,377 >  $\alpha$  = 0,05. It is caused by the breeders don't need much attention to cattle raising rabbits, so they can manage their time between household chores and raising rabbits.

## Acceptance of breeding rabbits

Value of variable regression coefficient of rabbit breeding income is 6,756. E-8 means that the income influences to the working time. If the income increase IDR10.000.000/month, so the work time will increase 0,6756 hours assuming other variables fixed.

Correlation coefficient value (r) variable ( $X_3$ ) breeding rabbits income 0m136 shows there is positive weak relationship to the work time outpouring (Y). Coefficient determinant value ( $r^2$ ) 0,018 means that partially contribution of rabbit livestock income ( $X_3$ ) 1,8 % to the ups and downs of the work time outpouring.

T count value -1,166 and t table 3,15 because t count < t table (-1,166 < 3,15), so the livestock income doesn't influence the work time outpouring of female rabbit breeder in Salokaraja. Thus,  $H_0$  is accepted or  $H_1$  is rejected. It also can be seen from significant value 0,248 >  $\alpha$  = 0,05.

#### Number of livestock rabbits

Variable regression coefficient value of number of rabbits 0,009 means number of rabbits influences the work time outpouring. If the number of rabbit gets additional 1 rabbit, the work time will increase 0,009 hours assuming other variables fixed. The illustration shows the more rabbits are raised by women, the longer time they will spend in the livestock. Hernanto (1990) in Rusdi (1995) said that the working needs in every branch differ based on activities, commodities, technology level, and intensity of combination from the scale of production factor and the time.

Correlation coefficient value (r) variable ( $X_4$ ) number of rabbit 0,733 shows that there is positive and strong relationship to the work time outpouring (Y). Coefficient determinant value ( $r^2$ ) 0,537 means partially the contribution of rabbits number ( $X_4$ ) 53,7% to the ups and downs of the work time outpouring.

T count variable value 9,156 and t table 3,15, because t count < t table (9,156 < 3,15), so number of rabbit variable influences to the work time female breeder in Salokaraja. Thus,  $H_0$  is rejected or  $H_1$  is accepted. It can be seen from significant value 0,000 >  $\alpha$  = 0,05. It is caused by the more number of rabbit, the breeders will spend much time to

care the rabbits, when female rabbit gives birth, breeders have to assist the baby rabbit breastfeed to its mother.

#### **Experience of rabbit livestock**

Variable regression coefficient value of rabbit livestock experience -0,022 means that the experience influences opposite to the work time outpouring. If there is additional 1 year experience, so the work time will decrease 0,022 hours assuming other variable fixed. It shows that experienced female breeders in managing their livestock. Mastuti and Hidayat (2008) said that the longer they do cattle the more knowledge they expected to get so their skill in livestock will be increased.

Correlation coefficient value (r) variable ( $X_5$ ) experience of rabbit livestock -0,102 shows that there is negative weak relationship to the work time outpouring (Y). Coefficient determinant value ( $r^2$ ) 0,010 means the contribution of experience variable ( $X_5$ ) 1,0% to the ups and downs of female work time outpouring.

 $T_{count}$  variable value -0,869 and t table 3,15 because t  $_{count}$  < t table (-0,869 < 3,15), so the experience variable influences to the work time female breeders in Salokaraja. Thus,  $H_0$  is accepted or  $H_1$  is rejected. It can be seen from the significant value 0,388 >  $\alpha$  = 0,05.

The length of breeding does not influence to the breeders in managing their traditional livestock, thus between experienced and non experienced respondents does not have different in managing their livestock. Average breeders still use simple and hereditary technology so the experience or the length they do the cattle don't give any great influence to the breeder income.

## **CONCLUSIONS**

From the regression equation appeared that if the other regression coefficient variables are not constant so every additional IDR1.000.000/month will decrease work time outpouring 0,1263 hours. It shows that family income decrease so the female women breeders prefer to do another activity that can increase their incomes.

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