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The Role of Gender toward Biosecurity on Laying Hen Farms

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ABSTRACT

Biosecurity became a big issue on laying hen farms after booming of Avian influenza which was caused by H5N1virus, and gender play an important role to do biosecurity practices. The aimed of this research was to know the role of gender toward biosecurity on laying hen farms. The results of this research showed that the role of gender toward biosecurity on laying hen farms majority was done mostly by men. Women play a role to help her husband in the stable since women have domestic job at home. Woman should be encouraged to increase their role toward biosecurity on laying hen and Government should provide facilities for training , extension, and access for credit.

KEY WORDS

biosecurity, gender, laying hen farms, role.

INTRODUCTION

Biosecurity is an important practices to be applied in poultry farms, because some diseases can be reduced and production can be increased. According to [9], biosecurity was categorized as important. Biosecurity is security from transmission of infectious diseases, parasites and pests with focussing on improving the health status of animal and preventing the introduction of new diseases pathogen by assessing all possible risks to animal health [4]-[5]-[6]-[7]-[8]-[9]-[16]-[21]. Reference [2] argued that biosecurity consisted of isolation, traffic control and sanitation.

According to [17], biosecurity should be increased to reduce disease outbreak. Biosecurity will not only maintain the good environment but also minimize infectious and zoonotic diseases and subsequently increase public health.

Gender issues according to [1] was looked in discussion and gender disparities in the field of economics and decision making. Integration analysis of gender relations in the agro-economics study is very important because the paradigm of access, control and benefit from the resources based on social relationships between raising many out of business.

Reference [20] added that the poultry are reared traditionally most favorable to women. The role of women in Kenya is very dominant in animal husbandry activities, except the cage repair is done by /picking-up eggs and handle heating on day old chicks. While men handle the transport of feed and day old chicks. The access of women to earn income outside the cage and get very limited training. The education level of women is lower than men, but access to the market is the same between woman and men.

According to [3], rural women around the world play an important role in the field of food security, but they have problems in approaching the source of agricultural extension services, especially in developing countries. Reference [19] said that some of the problems faced by women in rural India is a low level of education, domestic

work is time consuming, low economic status, lack of information and lack of training. Reference [11] said that the majority of rural women participated regularly in selling egg/poultry and egg collection.

Sidrap regency as one of regencies in South Sulawesi has a great potential on laying hen farms. The population of laying hen was 3,827,941 tail and the egg production was 26,830,384 kg which contributed 51.56% to total egg production in South Sulawesi in 2012. So far there is no research was conducted to find out the role of gender toward biosecurity on laying hen farms in Indonesia. Therefore, it is vey important to do this research.

The objective of this research was to explore the role of gender toward biosecurity on laying hen farms.

MATERIALS AND METHOD

A. Design Research:

This research was conducted for 2 months in 2016. Reference [12] stated that Participatory Rural Appraisal (PRA) techniques like focus group discussion (FGDs), seasonal calendar and historical analysis were used to gather information. Gender analysis tools are also used to access the role of gender which consisted of access, control, decision making and benefit.Table 1 showed indicators measurement.

Table 1: Indicators Measurement for The Role of Gender toward Biosecurity on Laying Hen Farms

Variables	Sub Variables	Indicators
Role of gender	a. Access	✓ Training and extension
		✓ Additional income
	b. Decision making	✓ Selling eggs
		✓ Eggs for consumption
	c. Control	✓ Sanitation
		✓ Vaccination
		✓ Traffic control
	d. Benefit	✓ Increase welfare

The population in this study were all laying hen farms. Total sample was 75 which were choosed through simple random sampling technique. To determine the role of gender toward biosecurity on laying hen farms, descriptive statistics were used by using frequency distribution table [18].

Role is a dynamic aspect of the status when a person is exercising its rights. Access is gender opportunity in obtaining or use of information resources and institutions on laying chicken business, such as counseling, newspapers / magazines, and electronic media. Control is the authority of gender in the activities at the laying hen farms. The benefit is the use of resources that can be enjoyed optimally on laying hen farms such as increased revenue.

Data analysis:

Data were analyzed to determine the extent of gender roles by using quantitative descriptive. To know the role of gender, four aspects which consisted of access, control, decision making and benefit were measured by using Guttman scale: 1 for “yes” and 0 for “no” answer [15].

RESULTS AND DISCUSSION

A. Characteristics of respondents:

The characteristics of respondents on laying hen smallholders can be seen in Table 2.

Table 2: Characteristics of laying hen smallholders

No	Item	Average
1	Age (year)	46.65
2	Formal education (year)	10
3	Farm experience (year)	11.84
4	Chicken population (tail)	10,271

Table 2 showed that on average the age of respondents was 46.65 years, with the youngest 32 years and the oldest was 70 years. In other words, most of respondents were in productive periode. Mayority of respondents spent 10 years for shooling. This mean they have finished their study from Senior High School (43%).The mean of chicken ownership was 10,271 tail, with the lowest population was 3,000 tails and the highest population was

110,000 tails. According to their experience in farms, on average there was 11.84 years, with the shortest was 7 years and the longest was 25 years. Respondents got experience from their parents.

B. The role of gender toward biosecurity on laying hen farms:

B1. Sanitation:

Table 3 showed that for sanitation, cleaning the dringking place and feeding place mostly were done by women daily, 44.65% and 55.36% respectively. While men cleaned feces (65.75%) every 3 - 4 month. Feces were cleaned and sold to horticulture farmers. Cleaning chicken barn was done together both by men and women (66.00%). Reference [13] argued that women washed the poultry barn stables.

Table 3: The Role of Gender Toward Biosecurity Practices

No	Activities	Men (%)	Women (%)	Men and Women (%)
A.	Control on Biosecurity Practices			
	a. Sanitation			
1	Cleaning chicken cages	23.33	10.67	66.00
2	Cleaning dringking water place	15.66	44.65	39.69
3	Cleaning feeding place	20.50	55.36	24.14
4	Cleaning feces	65.75	34.25	0
	b. Vaccination			
1	Curing sick chickens	44.63	55.37	0
2	Vaccination	43.65	56.35	0
	c. Traffic			
1	Animal	65.50	34.50	0
2	People	73.70	26.30	0
3	Vehicle	54.34	0	45.66
B	Access			
1	Access to training or extention	75.40	6.40	18.20
2	Access to get additional income	87.50	12.50	0
3	Access to market	15.70	5.60	78.70
C	Decision making			
1	Sell the eggs	10.40	12.60	77.00
2	Consume the eggs	0	35.50	64.50
D.	Benefit			
1	Benefit from biosecurity practices on laying hen farms	5.25	7.50	87.25

B2. Vaccination:

Vaccination and curing sick chickens were mostly done by women (55.37%) and (56.35%) respectively. This research did not agree with that of [14] who argued that men participate more in management activities such as vaccination.

B3. Traffic:

Traffic for animal, person and vehicle around the chicken cage mostly were done by men: 65.50%, 73.70%, 54.34% respectively. This mean that men dominated than women for traffic in the farms.

B4. Access:

Based on access to training or extention, men (75.40%) dominated women (6.40%). This mean that women in rural lack access to get some information. The research was supported by [3] and [17] who found that women were lack of training.

With regard to access to get additional income, men (87.50%) dominated women (12.507%). The research agree with that of [20] who said that the access of women to earn income outside the cage was limited. Access to market was done mostly by both men and women (78.70%).

B5. Decision making:

The decision making based on selling the eggs (77.00%) and consume the eggs (64.50%), mayority was done by both men and women. This research agree with that of [13] who said that the rural poultry ownership is shared among family members, but is dominated by women (63%) and children (18%). Decision making regarding the sale, consumption and gifts for the guests on rural poultry in Western Kenya reflects a plurality. All family members are involved as workers in poultry farms. Men and children are mainly doing construction while women wash the poultry barn stables, feed and treatment of poultry. Women and children do most of the daily routine in the management of poultry. Men do occasionally work which needed cash as the purchase of inputs. For the treatment of poultry using conventional medicines. Women selling eggs occasionally. Women dominate access to

and control of food and gifts for guests (non-cash), while men dominate the cash from poultry (cash). Owner of rural poultry and access to benefit is not exclusive domain of women. Decision-making by woman in rural poultry production system is limited to decisions related to non-cash temporary cash-related decision is made mostly by men.

B 6. Benefit:

Both men and women got the benefit from poultry farms (87.25%). This research was supported by [20] who argued that the poultry farm has a huge contribution to the welfare of families in urban areas, which is between 1-32% in extensive production system.

Conclusion:

Based on the research, it can be concluded that the role of gender toward biosecurity on laying hen farms was dominated by men. Women should be given the opportunity to contribute to the implementation of biosecurity on poultry farms. Understanding of the husband and the role of government are needed. This research has big contribution the knowledge especially to the government which can provide facilities and provide good policies for women to participate in poultry farms.

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