

HUMAN RESOURCES DEVELOPMENT STRATEGY IN BRUCELLOSIS DISEASES MONITORING AT SENTRA PETERNAKAN RAKYAT CINAGARABOGO, SUBANG

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Abstract

Running business in group, in Indonesian is Sentra Peternakan Rakyat (SPR), which are sustainably running business together is the hope for all the farmers and also the government to meet the needs of national meats. In the past, some of farmers must disband and terminate its business due to wrong strategy in their business development. The important factor to running the business is not only the quantity of animal feed but also animal health and how to control the disease itself. One of important diseases we concerned is Brucellosis, is an infectious disease caused by a type of bacteria called *Brucella*. This study was conduct to discover the proper strategy to develop the human resources in monitoring brucellosis diseases at Sentra Peternakan Rakyat Cinarabogo, Subang. We assumed that the knowledge of Brucellosis at the farmers level is low because they could not recognize the symptom of brucellosis, how to explain the symptom and also how to solve the problem correlated with brucellosis. The sample used is 20 people consist of 9 people is from Gugus Perwakilan Pemilik Ternak (GPPT) SPR Cinagarabogo and 11 the coordinator of incorporated SPR at Cinagarabogo. The data was gathered used questioners and focus Group Discussion (FGD) that also correlated with the purpose of this study. The result showed that the knowledge level of correspondence is good. It is also showed how the correspondence explains and also solve when the symptom is appeared. The implication from this research still needs the increment of knowledge about the handling of cattle infected brucellosis by educating and training in animal health to the farmers. Moreover, the government policy still needs encouraged to be given to farmers and to solve however the livestock must be cut forced as a result of infecting brucellosis with considering the weight of livestock and the market price.

Keywords: *Human Resource Development, Brucellosis, SPR*

1. INTRODUCTION

The livestock sector and animal health are two important parts of the agricultural sector and have big large role in food security, because the provision of animal food is low to meet the animal protein consumption of Indonesian. The Government of the Republic Indonesia in 2015 through the Directorate General of Livestock and Animal Health Ministry of Agriculture has launched a program Sentra Peternakan Rakyat, it is commonly abbreviated as SPR. This program is a development system of the People's School of Animal Husbandry already that firstly initiated by Institut Pertanian Bogor. The objective of establishing SPR is to form a collective institutional business with the goal of eventually making farmers sovereign. In 2016, there are 50 SPR in 49

districts in 17 province in Indonesia. In Subang, there are two locations of SPR, they are Cinagarabogo and Kasaliang. The Cinagarabogo SPR which is included in Cipunagara and Cibogo district, there also include 18 villages in two districts. The large of SPR Cinagarabogo is approximately 25,000 hectares with the furthest distance 25 Km from the secretariat SPR Cinagarabogo.

The formation of the SPR must satisfy three criteria, such as: technical criteria, the criteria of location and administrative in accordance with general guidelines Sentra Peternakan Rakyat published by the Directorate General of Livestock and Animal Health Ministry of Agriculture. Innovation of development SPR has been formed such as Gugus Perwakilan Pemilik Ternak (GPPT) that are elected representatives of the 20 owners of livestock owners in two districts, forming GPPT facilitated by the District Veterinary Office Subang. They are 9 people in GPPT Cinagarabogo SPR. The function of GPPT is to formulate and make policies related to the course of SPR (Kementan, 2015).

The most important factor in livestock business is only the feed but also animal health and animal control disease, including Brucellosis. Controlling is an organized effort in local government or the central government to reduce the occurrence (incidence) or the loss of a disease to a level of control (does not have a serious impact on the stability of animal and public health). While eradication is an organized effort to remove or eliminate a disease in a particular area until it happens again (Bahri, 2010). The result of 800 blood sample in SPR Cinagarabogo is one positive sample got (B-Vet Subang, 2016).

Brucellosis disease caused by bacteria of the genus *Brucella* which can cause abortion (miscarriage) in ruminants and are zoonotic (transmitted from animals to man and vice versa). In cattle, the infection caused by the bacterium *Brucella abortus* and is known to have seven biotypes of *B. Abortus* biotype 1-6 and biotypes 9 (Alton, 1978). In Indonesia Brucellosis in cattle is caused by infection with *B. Abortus* biotypes 1, then biotype biotypes 2 and 3 (Sudibyo, 1994). Both in economic and social, brucellosis caused huge losses. The economic losses could reach 385 billion per year if there is no controlling. Until this year, the free area of the disease Brucellosis is Bali, while Lombok has been successfully released in 2002 and Sumbawa is free in early 2006 and Subang, West Java is still in endemic, although not considered endemic. However, the possibility of outbreaks of Brucellosis should still watch out for the eradication of diseases that are not optimal and would carefully expand the spread of disease (Bahri, 2010).

In facing the challenges above, the Human Resources (HR) in the region is the one of the critical success factors in preventive of brucellosis diseases in SPR Cinagarabogo. HR has a responsibility to provide a sustainable competitive advantage for the organization (Chen, 2006). The achievement of the objectives requires human resources that have the high ability of control brucellosis.

This study aims to determine the strategy used for human resource development Breeders in disease surveillance Brucellosis (SPR) Cinagarabogo, and the specific characteristic on the level of knowledge farmers about brucellosis include symptom of the disease brucellosis, procedures for reporting and handling of animals infected brucellosis.

2. METHODOLOGY

This research was held in Sentra Peternakan Rakyat (SPR) Cinagarabogo, Kp. Citapen, Padamulya, Cipunagara, Subang, West Java and conducted in groups incorporated in SPR Cinagara

Bogor by narrowing the scope of the research only on the Cluster Representative SPR Cinagarabogo Livestock owners and Chairman of the group. The total sample used in this study is 20 people consist of 9 Gugus Perwakilan Pemilik Ternak (GPPT) SPR Cinagarabogo and 11 leaders who joined the SPR Cinagarabogo. This research is a descriptive study using survey. Data were collected using questionnaires that are arranged in a list of statements with Likert scale (liket, 1932) or 5 indicator farmers knowledge that is very poor, poor, pretty, good and excellent. Reinforcement of data from a questionnaire conducted by Focus Group Discussion (FGD) associated with the object to obtain an overall picture of farmers knowledge about Brucellosis.

Data analysis using descriptive analysis that is expected to be obtained more accurate results about the response given by the respondent. After the data is obtained, there are two classifications based on the value and then by multiplying the amount of weight on a certain category that has been set by the number of respondents. The average score also conducted to get the average to determine the size of the concentration and size diversity. Analysis of the average score is used to analyze the average of respondents' attitudes about the dimensions of the research objectives. Conversion method ordinal data into interval data used Method Successive Interval (Juliandi, 2013). MSI is used in parametric statistical analysis prerequisite for having a measurement scale is the scale interval. While the data obtained in this study are ordinal data through calculation of the Likert scale questionnaire, then to transform data into a scale interval ordinal scale used MSI. Testing the validity of each item used item analysis, which correlate to score each item with a total score which is the sum score of grains. According Sugiyono (2008), the valid of instrument is the correlation coefficient between the item is positive and upward magnitude 0.3 with an error rate (alpha) of 0.05.

3. RESULT

The results showed that the level of knowledge of farmers/respondent on brucellosis with an average score of 3.99, it means good. The level of knowledge of farmers/respondent on the symptom of brucellosis disease is an average score of 3.97 (in good criteria), the level of knowledge of farmers/respondent on reporting procedures with an average of 3.93 (in good criteria) and the level of knowledge of farmers/respondent about the handling of cattle infected with brucellosis with an average score of 2.95 so in sufficient criteria. This study shows the validity of the test items on the whole the correlation coefficient of each variable studied is above 0.3 and the correlation coefficient indicates the significance or less than 0.05 so the items used in this study is said to be valid and fit for use for all respondents who have been targeted.

Based on the esults of research conducted using Focus Group Discussion on farmers knowledge related to Brucella disease or brucellosis. Among them, farmers want to enhance knowledge about the handling of infected cattle by way of counselling or trainings animal health to farmers, extension more focused on cases that occurred in breeder in addition, farmers also want the government policy of incentives given to farmers and livestock flock should be cut as a result of contracting brucellosis forcibly taking into account the weight of livestock and the market price.

4. DISCUSSION

In general, the breeder in Cinagarabogo could recognize and explain the symptom of brucellosis, and then they could report the result. But, they couldn't handle well the cattle infected by brucellosis. They got the information from the local service officer, the brochure or socialization undertaken by the animal husbandry department Subang district.

There are two conclusions of FGD result; firstly, the breeders want the improvisation of their knowledge about handling infected cattle, in case brucellosis disease. The improvisation can be held in counselling program or training of animal health that can be directly followed by farmers. Considering of farmer advise, the Ministry of Agriculture as an institution can contribute among

others are making the Guidelines, Circular Letter to the Regions and co-ordination with relevant agencies to support training programs or counseling animal health, including public health aspects in this regard zoonoses (diseases transmitted from animals to human and otherwise). The control brucellosis policy and eradication of disease based on prevalence rates of a region (Naipospos, 2005). To optimize the objectives and evaluation of the implementation of activities in the area carried out through direct outreach and communication, as well as making posters disease as a guideline and anticipation of communities to deal with disease outbreaks.

Second, farmers also want the incentive policies given by the government to group of farmer and the farmer that has infected cattle and must be cut forced taking into account the weight of cattle slaughtered and price based on market prices. Controlling of brucellosis and eradication programs in various countries generally use active vaccine B. Abortus S19 because it can provide protection of 70% during the production period (Alton, 1978). However, controlling and eradication of brucellosis with vaccine B.abortus S 19 can cause latent infection and persistent antibody titers were indistinguishable serologically with natural infection that may confound the diagnosis. The error rate of serological diagnosis in brucellosis will be suppressed by the development-Competitive ELISA test (Sudibyo, 1995), because by using conventional test RBPT and CFT were not capable of distinguishing serologically between a cow that got natural infection and vaccinated B.abortus S19. The steps taken by the government to control brucellosis is to test and slaughter that also called the cutting force. In the terms of compensation, the government does not yet take into account the weight of livestock and the market price.

5. CONCLUSION

Breeders in Subang have already understand the knowledgement of Brucellosis in general ranging from understanding or terms of brucellosis, symptom of brucellosis, procedures for reporting and handling of cattle infected with brucellosis. Breeders hope they will get the further education or training of animal health that directly followed by farmers and also farmers want there is a compensation of beef cattle in a forced adapted to the weight of livestock and prices based on market prices.

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