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THE ROLE OF DAIRY GOAT INDUSTRY IN FOOD SECURITY, SUSTAINABLE AGRICULTURE PRODUCTION, AND ECONOMIC COMMUNITIES

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Recording Application for Ettawa-Crossed Goat Herd Improvement: A Case Study in Samigaluh, Kulon Progo District

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Abstract The program of Ettawa-crossed goat recording system has been carried out in Samigaluh, Kulon Progo District to develop Village Breeding Centre (VBC). Initially, a goat herd namely "Menoreh Maju" located in Kayu Gede, Samigaluh was a pilot program. Twelve farmers and total 74 heads of goat were involved in the program. The recording system program was initiated with the purpose of achieving genetic improvement in VBC as superior kid goat producers. Community mentoring method was used to achieve the goal of the program. The individual data have been recorded and made up an individual card. The goat characteristics were identified based on animal herd age and sex, birth and weaning data, and milk production. Those data were recorded in farmer's log book. The leader of goat farmer association collected and evaluated the recording data in every month on their regular meeting. The farmers actively participated in the program socialization. However, as the program implemented, it was soon realized that some farmers would not participate in the program due to their goat have been sold for economically reason. In conclusion, the mentoring of the program is still needed for the better future in herd improvement.

Keywords Ettawa-crossed Goat, Recording, Samigaluh.

1. Introduction

Village breeding program was defined as breeding activities carried out by communities of smallholder farmers, often at subsistence level [1]. The most important for genetic improvement in VBC is making a breeding program including parameters selection traits. Animal recording is play important role for any serious effort to develop livestock production at farm, industry and national level [2]. In small holder under traditional system, recording face many cases difficult due to the animals presents [3] and farmers with the more complications. For VBC, recording is important to provide information to farmers for decision-making, management and culling even in breeding plan. However, in case in Indonesia especially in Yogyakarta do not have recording systems yet. This is because of the farmers is not aware of the usefulness of animal recording and there are no leading institutions that can initiate a goat recording system. The Ettawa-crossed goats recording system in Samigaluh district was initially originated with an idea on the developing of goat VBC by collaboration between Faculty of Animal Science, Universitas Gadjah Mada and Kulon Progo Regency through PHKI (Program Hibah Kompetisi Institusi/Institution Grant Competition Program). Recording is one of the PHKI's concern. Most of the farms used hand kept records and wrote down the data on the pen (cage) for controlling their breeding farm activity. No hard book (or herd registry) is processed in the VBC. Therefore, recording mentoring is very important to develop for sustaining the VBC.
2. Material and Methods

A goat herd namely "Menoreh Maju" is one of the VBC members located in Kayu Gede, Semigaluh. These goat herd members were being a pilot project for the mentoring of recording application program. Twelve farmers and total 74 head of goat were involved in the program. There were three steps for the implementation of recording system: (1) socialization of the recording type, procedure and benefit of goat recording; (2) recording was undertaken by farmers and by faculty team as a mentor of the program; and (3) evaluation the application of recording system. The leader of goat herd together with the team must maintain and check the data at their meeting regularly to provide authentication and complete for the records. The categories of Ettawa-crossed Goat recorded included offspring, males, females and parents. The individual record consisted of a simple pedigree, characteristic performance and goat identification. Other types of records were goat performance of birth, weaning, reproducitivy and health care record.

3. Results and Discussion

All dairy goat (Ettawa-crossed Goat) farming system in VBC of Semigaluh District is based on traditional smallholders. Most of the herds have an average of five animals. A few herds have a number of goats between 8-16 animals. Most of them get their feeding in the individual pen. According to the type of records, only the date of kid birth and mating date have been recorded by hand and wrote down on the pen (cage) (Fig.1). No identification provided for the goats. The breeding program included the selection of goat breeding stock depend only on phenotypes. Initially the program, the individual record have been recorded and made up an individual card (Fig.2). Photographic was used for individual goat identification because the use of ear tag was unusual, not marketable and not qualified for goat competition. The farmers also recorded the offspring, males, females and parents. For the traits such as birth and weaning data, milk production, reproducitivy and health records which should be recorded by every farmers in log book provided are on going process. Some farmers still prefer used their own recording system. However, the herd leaders collected and recorded monthly in regular meeting. The team will input the data on the database at faculty level. It is related that the efficient breeding programme especially to performance or traits data as well as pedigree record directly at village level seems to be extremely difficult. Therefore, many ways should be involved. For example: to promote the recording activity, an incentive will be provided to farmers who have completed the records in the form of money as award to improve their herd.

Figure 1. An example of recording by hand at goat pen

Figure 2. An example of goat individual card
4. Conclusion

The mentoring of recording application in Oetta-crossed goat herds VRC is still needed to provide information and help the farmers for decision-making their breeding program. Increasing awareness of the usefulness animal recording, stimulating competitiveness between farmers and providing incentives for their achievement are needed to perform. Recording method should be changed with simple records in small to medium-size herds.

5. References


Certificate

is presented to

Dyah Maharani, SPt., MP., PhD

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