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ABSTRACT

This research was conducted in Majene regency using 30 respondents divided into two groups included 15 respondents in experiment group and 15 respondents in control group. Both groups were given different treatment. The first group was given participatory training intervention and the second group was given training intervention in developing of feed, health and by-products. The aim of this research was to determine the difference between experiment and control group and also to know the satisfaction rate for both groups. Analysis method used was pre-test and post-test. Result of this research was experiment group was very satisfying with the knowledge method. In contrast, the control group was not satisfying and their knowledge did not improve. Approach method of participatory training intervention through learning by doing method was done by the village farmers in Majene Regency, so that it can become economics machine for improvement of goat farmer’s income.

KEY WORDS

Intervention model, productive economy and goat farmer.

INTRODUCTION

The research of development model of goat farming business base on productive economy was designed into application research with research design “Pretest and posttest control group design” doing in two group of goat farmers. The first group was become as experiment group and the second group was become control group. This research was done in two steps. The first step was done pretest for the first and the second group with expecting to know the knowledge of farmers on feed concentrate making, fermentation, vaccination treatment, management of feces, urine and milk goat. After that, the second step was control group did not get intervention treatment in feed concentrate making, fermentation and goat vaccination method. This research aimed to solve goat farmer’s problem from at the past to now such as feeding that just gave forage and herb. The livestock manure in the form of feces and urine was not utilized as a material of value-added, as well as goat's milk was not being managed in a professional manner. In other sides, the farmers wanted their goat grow fast so that it can be sold fast. Unfortunately, it cannot be real because their goats grew late. The farmers did not get proper income because they do not have optimal knowledge in managing of goat business. After we indentified 20 respondents, almost all of the respondents only gave forage for their goat. In addition, goat’s feces and urine was utilized just for their own garden and even it throw away. Goat’s milk did not efficiently manage and as
family consuming in a number of farmers. Hadjigeorgiou [4] reported that the goats in Greece totaled 5.6 million head, and 95% is earmarked for the parent engine of rural economy and sourced from milk which is then made cheese. Robert [8] and Schoenian argued that to solve and to handle the goat health is needed facility and ability of the farmers, particularly in terms of maintaining the skills of breeders and cleaning the facilities related to the cultivation of goats. Schwabach [9] reported that adoption of vaccination technology, giving antibiotics is very important because the average farmers searching for a cure for their cattle after the cattle got disease, also rarely farmer adopt healthcare technology in the form of programs of prevention and control of disease. Later on, according to Okine et al. that silage can be produced with using some absorbent such as bran and soy bean skin to decrease the moisture. Silage product produced can be use for four days after the silo is opened. Silage began to experience weathering after the fifth day. Thus, silage technology can be used as a means of preservation mainly for storage of large amounts of feed. Then Wahyono [11] reported that many prospective farmers or goat farmers dissuade investors when it should count with the problem of forage, because they became hesitant when it must provide certain land area for growing forage with all the problems of governance of maintenance. Even the farmers in small business, sometimes in dry season must sell their goat to prevent the limited forage. What is this thing must happen for long time? The answer is this is the important thing of technology of fermented feed, complete feed, human resources quality, so that goat does not need to being given forage as a feed and it is managed by the farmers having capability and skill in good managing. Byaruhanga [2] argued base on his research in Uganda intended to improve family nutrition and income, as well as serve as the main livelihood, so maintenance is directed to the production of goat. In addition, the goats are cultivated by women and children, while it is marketed by the male adult, then the average of ownership of goats are nine up to ten head per household, with ≤ 5 acre land ownership.

Wahyono [11] said that the superiority of complete feed is balancing nutrition and the cheap material. This is possible because the raw materials derived from agricultural and agro-industrial waste treatment with supplementation ingredients of high nutritional value. The other superiorities of complete feed are labor efficiency (1 labor for 100-150 head of goat), the easier application, the shorter time of fattening (3-4 month) but has high growing rate (100-150 g/head/day), efficient and economical (1 head of goat need 1 kg/day) and the cheaper cost (Rp. 1100,00/month). He also explained that the animal can adapt with herb given. The herb was made from organic extraction continued with fermented process added effective microorganism. The benefits of the herb are to accelerate the animal adaption using dry feed, to increase the palatability, effective of digestibility, animal health and to decrease the scent of animal feces. World Bank [13] explained that to continue the business of the needy, they should be formed into groups than empowered. Waseko Tirta Consultant and Disiplan Consultant [13] stated that the need for rural and urban communities is empowered, especially who are poor through the detection of poverty and they should be fostered in group unit. Nuch [7] stated for the success of community members netted in the group are a very important aspect to be addressed before the debriefing coaching social aspects of community development, economic development, and the physical environment should be conducted initial observations of the social aspects of the economy is a problem for them. It can be answered by fostering active community participation for the material provided is in accordance with the needs of the target. Therefore koesnadi stated that the goal will easily accept a new thing (innovation) if the material is provided according to needs and to being implicated. Tanrigiling revealed base on his research that farmer position is weak from the knowledge aspect, financial, networking and technology, therefore to empowering them is needed the role of extension agent, banks and capacity building of goat farmer to get out of their problem.

To get the solving from the problem experienced by the respondents need to see the condition of the farmer before and after get participatory training intervention. So that this research used formula said by Arikunto, [1] that argued the design of this kind were observed in two times that before the experiment and after the experiment. The observation done before experiment (O.1) is called Pre-test and the observation done after experiment (O.2) is called Post-test. Moreover, the difference between O.1 and O2 is assumed as the effect of the treatment and intervention.

Related to some consideration, at the end of this research was done post-test to both groups as well as the group getting intervention and did not get the intervention. It aimed to assess the acquisition of knowledge about the treatment of the concentrate feed production, fermentation and how to vaccinate goats, as well as manure management and treatment of milk.

This research used 30 respondent having daily activity as goat farmer and a low knowledge about manufacture of concentrate feed, fermentation and vaccination, faces management and milk process. The respondents just know to give forage twice a day, and when their animals in an unhealthy state only given a traditional drug or herb. The respondent also did not process and manage the feces and milk in a good way so that they did not get added income from it. Respondent in a control and experiment groups can be seen their different after the intervention has done. The result expected from this research is development model of productive economic is created then can become an economic machine in Majene regency and it can be made as development regulation to develop rural productive economic.
This research aimed to know whether there are the different between group without intervention and the group with participatory training intervention.

**MATERIAL AND METHODS**

This research was conducted in March - April 2015 in Bababulo village, Pamboang district, Majene regency, West Sulawesi. Purposive sampling was used to determine the sample with consideration 15 respondent are from Palipi village, Banggae district and 15 respondent are from Bababulo village, Pamboang district. To distribute the knowledge, so that 7 respondent from Palipi village and 8 respondents from Bababulo village was made into one group as a control group with 15 respondents. The other respondents, 8 respondents from Palipi village and 7 respondents from Bababulo village were made into one group as an experiment group with 15 respondents. The feed material were fish flour, corn flour, fine bran, coconut oilcake, rice straw, Nutri Simba, tofu grounds, agricultural waste, brown sugar and salt. Medical equipment used is a syringe, antibiotic. Then, preparing for manufacture of solid fertilizers were goat’s feces, sewage plants, spade and thermometer. For liquid process prepared goat’s urine, jerry cans, hoses, bila fruit and EM4. To make dangke prepared goat’s milk, papaya latex, salt, pans, wooden spoons, coconut, tea strainers, plastic spoons, teaspoons and banana leaves. For more details, the control group and the experimental group were selected as the sample in the study as well as the location of activity as indicated on Table 1.

<table>
<thead>
<tr>
<th>No.</th>
<th>Farmer Location</th>
<th>The treatments of productive economy business</th>
<th>Control Group (Person)</th>
<th>Experimental group (Person)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Palipi village, Banggae district, Majene regency</td>
<td>Concentrate feed, Fermentation and Vaccination.</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>2.</td>
<td>Bababulo village, Pamboang district, Majene regency</td>
<td>Concentrate feed, Fermentation and Vaccination.</td>
<td>8</td>
<td>7</td>
</tr>
</tbody>
</table>

Source: The Data from purpose sampling.

Data source used in this research were a primer data as many as 30 respondent and all of the respondent have a problem in feed technology and health management. Secondary data used were from agricultural and livestock services of Majene regency, village office, BP3K, agency of regional development, group of farmer and bureau of statistics centre. Analysis method using was contribution analysis (percentage) or descriptive statistics analysis. The data collected from respondents of control group as well as experiment group were a result from the learning given in participatory training such as manufacture of feed (concentrate, fermentation), vaccination and by-products of goat. It figured in pre-test and post-test. Then, operational model gotten through the result of personal data of group control (without intervention of participatory training) and personal data of experimental group (getting participatory training intervention) with seeing their progress after pre-test and post-test of both group. All of the groups included in group of goat farmer with training material were manufacture of feed, vaccination, goat by-products so that it will appear the result gotten from both group. That result will create a proper model for development of productive economic business expected in this research.

**RESULT AND DISCUSSION**

The research result from control group and experimental group which consists of 15 respondent respectively through pre-test and post-test as a baseline expected in formed of alternative model of development of goat business that can be made as a reference for farmer and the government to improve the business of rural village.

Pre-test and post-test from all of respondents observed in this research showed there were the significant different between control group (without intervention of participatory training) and experimental group (participatory training intervention). For more detail, the data was presented in Table 2.
Experimental and control groups before given participatory training intervention have a low knowledge about concentrate feed, fermentation, vaccination and management of by-products of goat (Table 2). After the intervention of participatory training in the experimental group turned out to be very significant change or highly significant when compared with the control group (Table 2). There were no significant change of the knowledge about concentrate feed, fermentation, vaccination and management of by-products of goat in control group. The progress of experimental group was 100.00 % after participatory training intervention (Table 2), it means that all of respondent of experimental group have more knowledge about concentrate feed, fermentation, vaccination and management of by-products of goat. In contrast with control group, their progress was 0.00% (Table 2) or they have no knowledge about concentrate feed, fermentation, vaccination and management of by-products of goat. Increasing knowledge of the experimental group indicated that participatory training intervention with learning by doing method can increase the knowledge of farmer from unknown to know.

If the terms of the satisfaction level of respondents who received the intervention participatory training or experimental group and who did not receive training or training intervention control group obtained in this study, can be seen in the following Table 3.

Table 3 showed that average of respondents of experimental group expressed great satisfaction, while for respondents who do not follow the training intervention or the control group declared yet satisfied that the development of the respondents' knowledge without training intervention did not change when compared to the group that followed the training intervention.

**Conclusion:**
1. Approaching to coach of goat farmer to develop farmer goat business to achieve a productive economy can be done through participatory training interventions with the pattern of learning by doing.
2. Satisfaction level achieved by the intervention group experienced training or an experimental group in average feel very satisfied with the training, while the goat without the intervention or the control group participatory training in average feel dissatisfied with the lack of knowledge given to him.

**Suggestion:**
To achieve productive economic development for goat breeders in the rural village economy can be the engine, then the pattern is the approach that should be given training patterns participatory by learning by doing.
REFERENCES


