Vol 6 No 4, Desember 2022
ABDI DOSEN
Jurnal Pengabdian Pada Masyarakat
pISSN: 2614-6509
eISSN: 2620-5156

INITIATION OF INTENSIVE NATIVE CHICKEN RAISING PATTERNS, THROUGH CONSTRUCTION OF COLONY CAGES ON WOMEN'S FARMER GROUP'S YARD

Galy Hardyta [1], Mohamad Haris Septian [2], Usman Siswanto [3], Natalia Dewi Setyowening [4], Elisa [5]

[1,2,4,5] Jurusan Peternakan dan Perikanan, Fakultas Pertanian, Universitas Tidar, Magelang
[3] Jurusan Agronomi, Fakultas Pertanian, Universitas Tidar, Magelang
[1] galy@untidar.ac.id, [2] mharisseptian@untidar.ac.id, [3] usiswanto@yahoo.com, [4] nataliadewi022@gmail.com, [5] elisa@students.untidar.ac.id

Abstract

Native chickens have a good potential for production and business opportunities in intensive rearing. Rural communities that have raised native chickens traditionally have difficulties in implementing the intensive rearing method directly. Changes in society can be achieved through a program of activities resulting from social planning which is implemented in stages, systematically, and sustainably. This Community Service Program was aimed to assist rural communities in adopting the intensive rearing method of native chickens gradually. This program was focused on counseling about the management of domestic chicken rearing and the application of the Cage management system by changing the rearing of native chickens from umbaran to colony cage system on the land owned by the Kelompok Wanita Tani (KWT). Counseling was able to provide additional insight and basic knowledge regarding the intensive rearing of native chickens. The colony cages construction on KWT land was the initial stage of adopting an intensive rearing system. Through this program, KWT members also discovered several problems, which can be solved by this program or by the further implementation of this community service program.

Keywords: Native Chicken, Intensive Rearing Method, Colony Cages.

INTRODUCTION

Free-range chickens have good production potential and business opportunities if they are kept in an intensive pattern. Through breeding selection and an intensive maintenance pattern, the Agricultural Research and Development Agency has succeeded in forming superior free-range chickens with a relatively short production period. The egg-laying age of Balitbang superior free-range chickens is at the age of 20-22 weeks with egg production ranging from 160-180 eggs and a slaughter weight of 800-900 grams within 10 weeks (Sartika et al., 2014; Udjianto, 2018). Unfortunately, most of the maintenance of free-range chickens in the community is still traditional without a good maintenance system and feeding that is not to their nutritional needs (Sartika, 2016).

Maintenance of free-range chickens with an intensive pattern requires several indicators to be met, such as cage preparation, preparation before the arrival and arrival of seedlings, brooding management, growing management, and laying management. At each stage, it is still

Submitted: July-2022 Received: October-2022 Available online: December-2022

further broken down into detailed techniques (Sartika et al., 2014). Rural communities that are accustomed to raising native chickens with traditional patterns will find it difficult to adopt this intensive rearing pattern quickly. According to Astiti et al., (2012), people find it difficult to accept a change or new thing because they tend to be satisfied with what they have run. Changes in society can be achieved through a series of program activities resulting from social planning that are implemented in stages, systematically, and sustainably (Wiguna et al., 2016; Kartono and Nurcholis, 2016; Gunawan, 2018).

This Community Service Program aims to assist rural communities in adopting a pattern of raising intensive native chickens gradually. This program focuses on providing basic knowledge about domestic chicken rearing management and the application of cage management by changing the habit of raising native chickens from umbaran to rearing in colony cages on land owned by KWT.

IMPLEMENTATION METHOD

Place and time. This community service program was carried out at KWT Menur, Ngepung Hamlet, Bunder Village, Kapanewon Patuk, Gunung Kidul Regency, D.I Yogyakarta. KWT Menur is a partner of the Merdeka Learning-Independent Campus Animal Studies Program, Faculty of Agriculture, Tidar University in 2021. The program will run from September – December 2021.

Target Audience. The target audience for this community service are residents and members of KWT Menur, Ngepung Hamlet, Bunder Village, Kapanewon Patuk, Gunung Kidul Regency, D.I Yogyakarta.

Devotion Method. The implementation stage consists of three stages, namely community counseling and training, mentoring, and evaluation. Community outreach and training are carried out in three stages. The first phase will be held in September 2021 with an agenda for introducing programs and activity plans. The second stage is an outreach activity with the topic "management of free-range chickens" which will be held on October 12, 2021. The third stage is the construction of a colony cage which will be held from October 20 to 27, 2021. In this third stage activity, the community is assisted in the form of 20 free-range chickens. consisting of 16 female free-range chickens and 4 male free-range chickens.

Evaluation Method. Assistance is carried out by conducting weekly supervision of the KWT land used to raise native chickens. In this session, identification of the obstacles experienced by the community during the maintenance of free-range chickens was carried out and solutions were given to solve them. Evaluation of activities will be carried out in December 2021. In the evaluation session, public hearings are held regarding the implementation of the program and the potential of the technology offered. The results of the hearing are then used as an evaluation of the sustainability of the program.

RESULTS AND DISCUSSION

KWT Menur was chosen as the location for community service because it has members who are passionate and willing to learn and are open to accepting and adopting new technology. In addition, KWT Menur is used to using the village treasury area of 2,000 m2 to carry out agro-complex activities. So far, the agro-complex activities that have been carried out by KWT Menur are agricultural cultivation and tarpaulin pond fisheries, while livestock activities have

never been carried out. The free-range chicken was chosen as the object of cultivation in this program because it is a type of livestock that KWT members have grown accustomed to in their respective homes. Free-range chicken also has good environmental adaptability so it is easy to maintain and has good product marketing opportunities because it has a distinctive meat taste that cannot be replaced by purebred chicken (Udjianto, 2018).

Community service activities began with coordination with the Agricultural Extension Agency (BPP) Kapanewon Patuk and KWT Menur regarding the program plans to be implemented. The next stage of activity is counseling with the topic of "village chicken rearing management". There were 29 participants involved in this activity, consisting of two BPP officers and 27 members of KWT Menur. The knowledge introduced to the community is the management of native chickens which consists of management of feed, housing, drugs, and vaccines. During the outreach, the community received a questionnaire, each with 9 pre-test and post-test questions. Two post-test questions represent the community's understanding of program implementation. The first question is "whether to carry out the maintenance of free-range chickens in an intensive way?". The second question is “whether to build a stable that suits the needs of the livestock?”. The first question received a 56% "yes" answer, 25% "no" and 19% "no answer". The second question received 69% "yes" answers, 12% "no" and 19% "no answers". Based on these data, most people want to conduct an intensive selection of free-range chickens and will build cages that suit the needs of livestock. The data is presented in Figure 1.

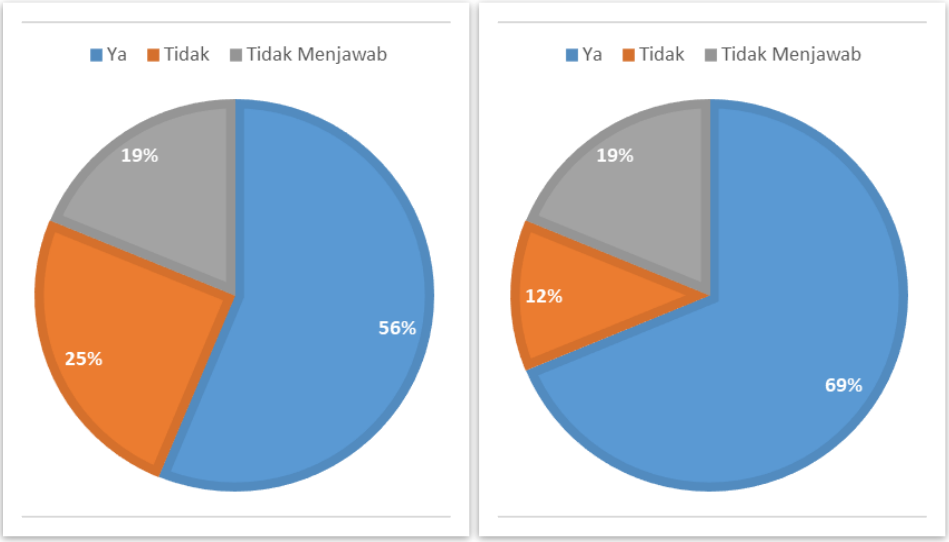

Figure 1. Answers to the first question (left). Answer to the second question (right)

Figure 2. Counseling on chicken rearing management at KWT Menur Ngepung Hamlet, Bunder Village, Kapanewon Patuk, Gunung Kidul Regency, with BPP Kapanewon Patuk

The activity stage after the community received counseling about the management of domestic chicken rearing was the construction of a colony cage. The colony cage made consists of a cage and a chicken activity area. A fence around the cage is made of bamboo; the Cage is made of wood, bamboo, and wire locket; the Studio floor is made of bamboo; and asbestos roofs. The cage made in this service has a total size of 3 x 6 m with a height of 2 m. There are four cages with an area of 1.5 m2 each. Each cage contains 5 chickens. The ratio of the area of the cage to the number of chickens per cage is more than sufficient. The recommended cage density standard is 6 chickens per square meter (Ekalinda and Zurriyati, 2019).

Figure 3. One of the colony cages at KWT Menur

The position of the cage is on the stage, 60 cm from the ground. The floor of the cage is designed to be hollow so that chicken manure can fall directly to the ground. The distance of the cage to the ground surface is indeed lower than the recommended standard of 150 – 160 m (Sartika, 2016), but a solution has been prepared to reduce the negative impact of the distance that is too low. The resulting chicken manure is processed by utilizing decomposing organisms so that the potential for odor contamination and the medium for the development of pathogenic microorganisms can be suppressed (Joly and Nikiema, 2019).

During the mentoring and evaluation stage, there were several challenges faced by KWT Menur members, including the presence of several chickens that were attacked by disease, and the eggs harvested had not received optimal management. The solution given to deal with disease problems is by disinfecting the cage and giving drugs and supplements to chickens (Iskandar, 2017). The solution offered to deal with the problem of egg management is to design an advanced program with the theme of hatchery management.

Through this community service program, it is hoped that KWT members can gradually adopt the pattern of intensive native chicken rearing. Through this program, it is hoped that the land owned by KWT can be used optimally.

CONCLUSION

Counseling can provide additional insight and basic knowledge about intensive native chicken rearing. The construction of colony cages on KWT land is the initial stage of implementing an intensive maintenance system. Through this program, KWT members also found several problems, which could be solved by this program or by the further implementation of this community service program.

Thank-you note

The author expresses his gratitude to Tidar University which has provided funding for the implementation of this Community Service through the Independent Learning-Independent Campus Program. Expressions of gratitude are also addressed to the Head of the Faculty of Agriculture, Tidar University, BPP Patuk, and KWT Menur for their support and participation in the implementation of this community service.

REFERENCES

Astiti, N.M.A.G.R., I.W. Astara dan G.A.P. Eryani. (2021). Teknologi penyuluhan dan komunikasi peternakan. Scopindo Media Pustaka. Surabaya.

Ekalinda, O. dan Y. Zurriyati. (2019). Budidaya ayam KUB. Balai Pengkajian Teknologi Pertanian Riau Badan Penelitian dan Pengembangan Pertanian Kementerian Pertanian. Riau.

Gunawan, W. (2018). Tahapan pembangunan masyarakat. Unpad Press. Bandung.

Hardyta, G., Septian, M. H., Siswanto, U., Setowening, N. D., & Elisa. (2018). Inisiasi Pola Pemeliharaan Ayam Kampung Intensif, Melalui Pembuatan Kandang Koloni di Lahan Kelompok Wanita Tani Teknologi. *Jurnal Panrita Abdi*, 2(2), 1-7.

Iskandar, S. (2017). Petunjuk teknis produksi ayam lokal pedaging unggul. Pusat Penelitian dan Pengembangan Peternakan Badan Penelitian dan Pengembangan Pertanian Kementerian Pertanian. Bogor.

Joly, G. and J. Nikiema. (2019). Global experiences on waste processing with black soldier fly (Hermetia illucens) from technology to business. IWMI. Ghana.

Kartono, D.T. dan H. Nurcholis. (2016). Konsep dan teori pembangunan. Dalam: Nurcholis, H., D.T. Kartono, S. Aisyah. Pembangunan masyarakat desa dan kota. Penerbit Universitas Terbuka. Tangerang.

Sartika, T. (2016). Panen ayam kampung 70 hari. Penebar Swadaya. Jakarta.

Sartika, T., H. Resnawati, S. Iskandar, M. Purba, D. Zainuddin dan A. Unadi. (2014). Teknik formulasi ransum ayam KUB berbasis bahan pakan lokal. Pusat Penelitian dan Pengembangan Peternakan Badan Penelitian dan Pengembangan Pertanian Kementerian Pertanian. Bogor.

Udjianto, A. (2018). Beternak ayam kampung paling unggul pedaging dan petelur KUB. AgroMedia Pustaka. Jakarta.

Wiguna, I.W.A.A., N.K.A.T. Yanti, I.N. Budiana, I.M. Astika, B. Natalia dan A. Prijanto. (2016). Penumbuhan dan pengembangan kelembagaan pertanian. Balai Pengkajian Teknologi Pertanian Bali Badan Penelitian dan Pengembangan Pertanian Kementerian Pertanian. Denpasar.