MALLOMO: Journal of Community Service
https://jurnal.umsrappang.ac.id/mallomo/index
Vol 6, No, 2, Juni 2026 , pp 1004-1010
ISSN: 2774 - 7220 (online)

Improvement Productivity Chicken Village through Implementation Modern Cages and Feed Fermentation Based Material Local

Improving Native Chicken Productivity Through the Application of Modern Housing and Fermented Feed Based on Local Ingredient

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Info article

Abstrak Kegiatan pengabdian kepada masyarakat ini dilatarbelakangi oleh rendahnya produktivitas ayam kampung yang disebabkan oleh sistem pemeliharaan tradisional dan keterbatasan pengetahuan peternak dalam menajemen pakan dan kandang. Kegiatan ini bertjuan untuk meningkatkan produktivitas ayam kampung melalui penerapoan kandang modern dan pakan fermentasi berbasis bahan lokal. Metode yang digunakan meliputi penyediaan kandang ayam kampung sederhana yang dimodifikasi menjadi lebih higienis, pemberian bantuan ternak dan pakan, serta penyuluhan dan pendampingan kepada mitra terkait menajemen pemeliharaan dan teknik pembuatan pakan fermentasi dari dedak padi, jagung giling, konsentrat, daun kelor yang difermentasi menggunakan larutan probiotik. Hasil kegiatan menunjukkan adanya peningkatan pengetahuan dan keterampilan mitra dalam pemeliharaan ayam kampung, ditandai dengan penerapan manajemen pakan yang lebih teratur, kondisi kandang yang lebiuh bersih , serta penurunan tingkat kematian ternak. Selain itu, penggunaan pakan fermentasi mampu meningkatkan efisiensi pakan dan mendukung pertumbuhan ayam yang lebih baik. Mitra juga mulai memahami strategi pemasaran sederhana untuk meningkatkan nilai ekonomi hasil ternak. Dengan demikian, penerapan kandang modern dan pakan fermentasi berbasis bahan lokal terbukti memberikan dampak positif terhadap peningkatan produktivitas ayam kampung dan kemandirian usaha peternak.

Abstract. *This community service activity was initiated in response to the low productivity of native chickens caused by traditional management practices and limited farmer knowledge this is feed and housing management. The program aims to enhance productivity through the*

application of improved housing system and fermented feed based on locally available ingredients. The approach involved the provision of simple but more hygienic chicken housing, distribution of chickens and feed, and training accompanied by continuous assistance for farmers on proper management practices and the preparation of fermented feed using rice bran, ground corn, concentrate, and moringa leaf meal [processed with probiotic solutions. The results indicated a significant improvement in farmers' knowledge and skills, reflected in better feeling management, improved sanitation of housing , and reduced mortality rates. Furthermore, the use of fermented feed contributed to better feed efficiency and supported improved growth performance of the chickens. Farmers also gained an understanding of basic marketing strategies to increase the economic value of their products. In conclusion, the implementation of improved housing and fermented feed based on local resources provides a positive impact on increasing native chicken productivity and supports the development of sustainable and independent agricultural -scale farming practices

Keyword
Indigenous_chicken
Modern_poultry_Housing
Fermented_feed

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INTRODUCTION

Productivity chicken village on level breeders scale small Still classified as low consequence implementation system maintenance traditional , limitations access technology , as well as low knowledge in management feed And health cattle . Condition This impact on height level death , slow growth , as well low mark economic gains breeders . A number of studies show that repair system maintenance through implementation more cages hygienic as well as giving feed quality can increase performance production chicken village in a way significant . By Because that , is necessary innovation technology simple and easy implemented by public For increase productivity cattle in a way sustainable

Activity devotion This aim For increase productivity chicken village through implementation simple modern cage And utilization feed fermentation based material local . Technology modern cages are applied emphasize on aspect ventilation , sanitation , and efficiency use space , whereas feed fermentation expected capable increase digestibility nutrients And efficiency feed . According to fermentation feed can increase quality nutrition And Power digest material feed so that support growth more optimal livestock . With Thus , integration second technology This expected can give impact real to improvement productivity chicken village

Compared to with activity devotion previously , this program own position as development from approach conventional which is generally only focus on counseling without accompanied by with provision means production in a way direct . A number of activity previously more emphasize on improvement knowledge breeders without implementation technology in a way real in the field . In

activity this , besides done counseling , too given help cages , livestock , and feed , as well as mentoring intensive so that partners can direct practice technology provided .

The novelty of activity devotion This located on integration between provision simple modern cage , formulation feed fermentation based material local , as well as approach mentoring sustainable that is not only focus on aspect technical production but Also covers strategy marketing results cattle . Approach This expected capable increase independence partners in manage business cattle chicken village in a way sustainable And give contribution to improvement welfare public breeders

Method

Tool And Material

The tools used in this community service activity include cage construction equipment such as hammers, saws, meters, and electric drills, as well as livestock maintenance equipment such as feed and drink containers, livestock scales, and plastic drums as feed fermentation containers. In addition, extension support tools such as laptops and printed media materials are used. The materials used consist of one-day-old free-range chicken chicks in healthy and uniform condition, feed ingredients in the form of 30 kg of rice bran, 40 kg of ground corn, 20 kg of concentrate, 5 kg of moringa leaf flour, and mineral and vitamin mix according to standard livestock needs. Fermentation materials include 200 ml of probiotic solution, 10 L of clean water, and 200 g of molasses or liquid brown sugar as an energy source for microorganisms. Cage construction materials include wood, bamboo, nails, and a roof that is adjusted to the conditions of the activity location

Method Implementation

According to This community service activity is implemented through a participatory approach, actively involving partners in every stage of the activity. Activities include providing production facilities, outreach, hands-on practice, and ongoing mentoring in raising free-range chickens and processing fermented feed. The implementation of the activity is carried out through several stages, as follows:

1. **Stage Preparation**

Covers coordination with partners , surveys location , identification needs , as well as compilation timetable activity .

2. Stage **Procurement Means And Infrastructure**

Done procurement material And tool For development cages , procurement seeds chicken village , and material feed And material fermentation .

3. **Stage Making Pen**

Construction of the cage chicken village simple with notice aspect ventilation , cleanliness , and comfort cattle .

4. **Stage Maintenance Cattle**

Placement chicken to in cage , giving feed and drinking water in a way regular , and implementation management health cattle .

5. **Stage Counseling And Making Feed Fermentation**

Feed made with mix bran rice , corn milled , concentrated , and flour leaf Moringa until homogeneous , then added solution probiotics that have been mixed with water and molasses . Mixture fermented in receptacle closed for 3–5 days with condition humidity around 30–40%.

Counseling done related management maintenance chicken village And strategy marketing results livestock , accompanied by mentoring direct For ensure partners capable apply technology provided .

Results and Discussions

Description Results Activity
Implementation activity devotion show existence change positive on system maintenance chicken the village that was carried out by partners . Pen simple modified become more modern capable increase cleanliness And circulation air , so that create a better environment comfortable for cattle . Besides that , the implementation feed fermentation based material local give alternative more feed efficient And easy applied by partners .

Table I. Farmer responses before and after implementation of programs and activities

Aspect	Before Activity	After Activities
System Pen	Traditional	Modern Semo
Management Maintenance	No Regular	Scheduled
Sanita Pen	Not enough Awake	More Clean
Mortality cattle	Tall	More Low
Knowledge Partners	Limited	Increase

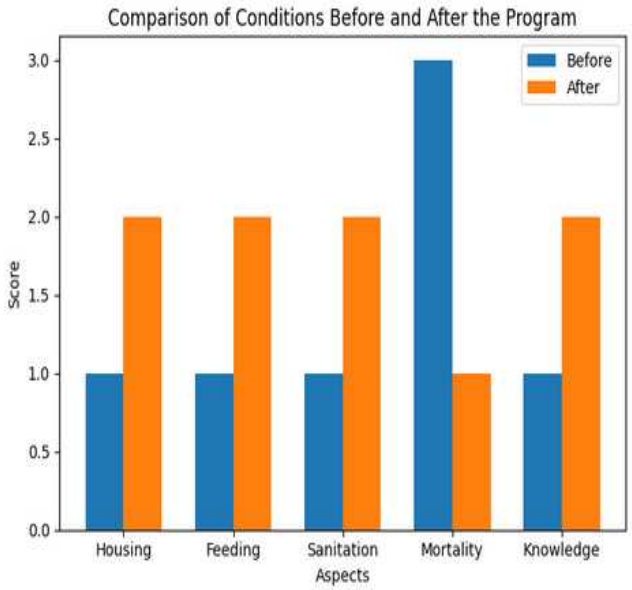

Figure 1. Partners' Conditions Before and After the Community Service Program

Besides that , the result observation show that chicken maintained village with system more cages Good And feed fermentation own more optimal growth and condition better health Good .

Figure 1. Condition pen Before Implementation Activity

Figure 2. Condition pen after implementation activity

Figure 3 Counseling Management Maintenance Chicken village And Fermentation Feed Chicken Village made from Feed local

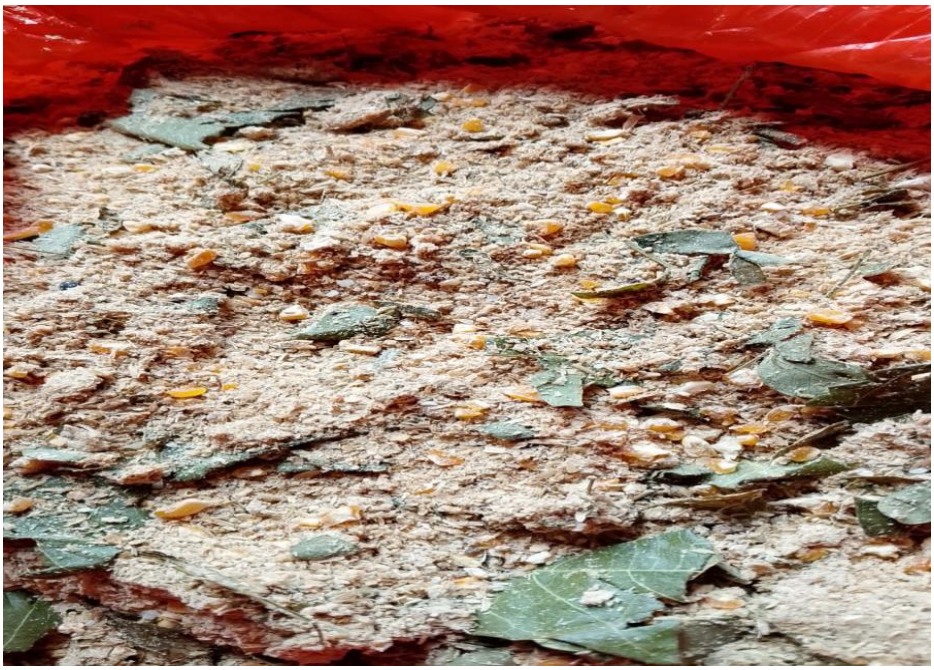

Figure 4. Results Fermentation Feed

Conclusion

Activity devotion to public through implementation pen chicken semi-modern village and feed fermentation based material local proven capable increase knowledge , skills , and productivity partners in business cattle chicken village . Repair management maintenance , especially on aspect sanitation cage , giving feed , and control health livestock , giving impact positive to growth And decline level death chicken . Besides that , utilization feed fermentation give alternative more feed efficient And easy applied by partners . In a way general , activities This succeed increase independence And potential economy partners . For activity Next , it is recommended done more assistance intensive And

sustainable development scale business , as well as strengthening aspect marketing digital- based so that the results cattle own Power more competitive high in the market .

Acknolegments

Writer convey saying accept love And the greatest appreciation to Assembly Education High , Research And Development Leader Center Muhammadiyah (Assembly) Research and Development Muhammadiyah) as party giver funds through scheme grant devotion to public so that activity This can implemented with good . Greetings accept love Also delivered to leadership And community academics University Muhammadiyah Parepare on support provided during implementation activity . High appreciation participate given to partners devotion And public local people who have participate active , and to source person And all over the party that has help in the implementation process , mentoring , until evaluation activity this . Hopefully results activity This can give sustainable benefits for development business livestock farming in the community .

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