



## Online Training for Silage Feed Production in Ngorong Village

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### Abstrak

Penerapan produksi pakan ternak fermentasi berpotensi untuk dilakukan di Desa Ngorong, Kecamatan Komodo, Kabupaten Manggarai Barat. Desa Ngorong sebenarnya memiliki potensi peternakan yang dapat menjadi sumber pendapatan utama untuk meningkatkan perekonomian masyarakat, namun permasalahannya masyarakat di Desa Ngorong belum mengetahui pemanfaatan silase untuk pakan ternak. Pakan silase dapat menjadi pilihan pakan ternak yang dapat dibuat sendiri oleh peternak sehingga lebih terjangkau oleh peternak. Oleh karena itu, kegiatan ini bertujuan untuk memberikan bantuan berupa alih teknologi pembuatan silase kepada para petani dan peternak di Desa Ngorong. Kegiatan pendampingan pembuatan silase dilakukan mulai bulan April hingga Oktober 2021. Metode pendekatan dalam mencapai tujuan pengabdian adalah dengan memberikan edukasi tentang teknik produksi silase yang berasal dari sumber daya lokal. Ini juga merupakan aplikasi dari hasil penelitian yang telah dilakukan oleh Fakultas Kedokteran Hewan Universitas Nusa Cendana. Penyampaian kegiatan edukasi dan pendampingan dilakukan secara online menggunakan platform aplikasi Zoom. Hasil pengabdian menunjukkan adanya daya serap petani yang maksimal dalam menerapkan penerapan teknologi pengolahan pakan silase, meningkatkan keterampilan petani dalam membuat silase dengan memanfaatkan sumber daya yang tersedia dalam jumlah banyak, dan meningkatkan pemahaman petani dalam memanfaatkan diversifikasi silase.

**Kata Kunci:** Silase, Komodo, Fermentasi, Pakan

### Abstract

The application of fermented animal feed production has the potential to be carried out in Ngorong Village, Komodo District, West Manggarai Regency. Ngorong village actually has livestock potential which can be the main source of income for improving the community's economy, but the problem is people in Ngorong village do not know about the use of silage for animal feed. Silage feed can be an option for animal feed that can be made by farmer itself so that it is more affordable for farmers. Therefore, this activity aims to provide assistance in the form of technology transfer for making silage to farmers and ranchers in Ngorong Village. Assistance activities for the manufacture of silage are carried out from April to October 2021. The approach method in achieving the goal of service is by providing education about silage production techniques derived from local resources. This is also an application of the results of research that has been carried out by the Faculty of Veterinary Medicine, Nusa Cendana University. The delivery of educational and mentoring activities is done online using the Zoom application platform. The results of the service show that there is maximum absorption from farmers in applying the application of silage feed processing technology, improving farmers' skills in making silage by utilizing available resources in large quantities, and increasing farmers' understanding in utilizing the diversification of silage.

**Keywords:** Silage, Komodo, Fermentation, Feed

## 1. INTRODUCTION

Animal feed and nutrition is an important chain in livestock production, namely between crop cultivation and animal protein production and processing (Christi et al., 2019; Den Hartog, 2009; Kama & Kasim, 2019; Siregar & Sari, 2021; Yanis, 2019). Fermented feed is very potential to be applied in animal feed. Amino acids and enzymes are known as

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fermentation products; both are very important for the optimization of livestock performance (Manalu, 2020; Said et al., 2018; Yulianto, R. et al., 2021; Yustendi et al., 2021). Nutrient digestibility in general can be improved and the amino acid profile adjusted to near ideal conditions. In addition, biologically active compounds are often formed, which may have a positive impact on the health status of animals (Atmoko et al., 2019; Datta et al., 2019; Den Hartog, 2009; Detha. et al., 2019; Suhendro et al., 2018).

The application of fermented animal feed production has the potential to be carried out in Nggorang Village, Komodo District, West Manggarai Regency (Detha, Annytha et al., 2019; Detha et al., 2019; Ndaong et al., 2019). This is because this area has the potential for livestock which can be the main source of income for improving the community's economy (Angoy et al., 2021; Ansa et al., 2021; Muttaqin et al., 2020). However, the villagers do not know about the use of silage for animal feed is the main problem in realizing advanced village farms. Where silage feed can be an option for animal feed that can be made by farmer itself so that it is more affordable for farmers. The potential of this farm can be a combination that runs in synergy if managed properly (Kusumaningrum et al., 2018; Sayuti et al., 2019; Sholihat et al., 2021; Situmorang et al., 2021; Superianto et al., 2018).

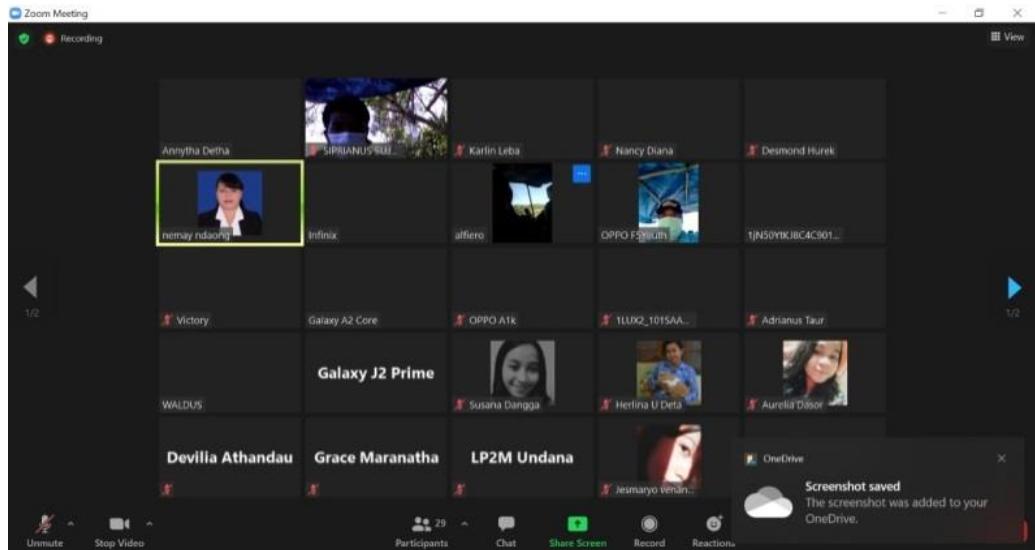
Based on the existing potential, the Faculty of Veterinary Medicine, Nusa Cendana University feels the need to do a service that elaborates on the potential of natural resources and human resources in the form of counseling, training and assistance in the form of technology transfer for silage making that emphasizes the principle of fermentation (Detha. et al., 2013; Ernis et al., 2021; Foeh. et al., 2021; Ndaong et al., 2019; Prima & Mahmud, 2021; Wardah et al., 2018). Therefore, this activity aims to provide assistance in the form of technology transfer for making silage to farmers and ranchers in Nggorang Village, Komodo District, West Manggarai Regency, East Nusa Tenggara. In this service, it is hoped that farmers in Ngorang village will be helped in terms of animal feed and reduce costs incurred by farmers.

## 2. METHOD

Assistance activities for the manufacture of silage are carried out from April to October 2021 in Nggorang Village, Komodo District, West Manggarai, NTT. The approach method in achieving the goal of service is by providing education about silage production techniques derived from local resources. This is also an application of the results of research that has been carried out by the Faculty of Veterinary Medicine, Nusa Cendana University (Detha, Annytha et al., 2019; Foeh, 2020). In supporting the implementation of activities, information transfer is carried out effectively but still provides optimal results. The delivery of educational and mentoring activities is done online using the Zoom application platform. This was done due to limited access to service locations due to the Covid-19 pandemic.

## 3. RESULT AND DISCUSSION

Assistance activities in the transfer of knowledge in the manufacture of silage are (1) the provision of a module or a pocket book on the introduction of silage, how to make silage and how to apply silage; (2) The material for making silage is given through zoom media regarding the introduction of silage, how to make silage fertilizer and how to apply silage; (3) Delivering silage-making techniques and direct working demonstrations through one of the partners who have been previously trained to the new group; And (4) direct assistance to breeders and farmers after the submission of materials.



**Figure 1.** Transfer of silage-making learning materials using the Zoom Meeting Platform

The provision of material on silage making was attended by the target community from the village of Nggorang. The target community was very enthusiastic about participating in the training, as shown in Figure 1.



**Figure 2.** The process of making silage

The implementation of silage making activities and direct work demonstrations through one of the partners who have received previous training, as shown in Figure 2. Based on the implementation of the assistance that has been carried out, the results obtained are that the general goal has been achieved, namely the application of silage feed processing technology in Mitra Village as the main source of animal feed by implementing downstream research results that have been produced. Based on the results of the service, it was also found that there was an increase in the skills of farmers in making silage by utilizing available sources of rice straw agricultural waste in large quantities.

Other service results also show an increase in the understanding of farmers in utilizing the diversification of other types of feed that are potential and available in large quantities. Farmers also understand that silage has appropriate nutritional value to be used as an alternative to animal feed that is processed properly so that it can maximize feed sources.

Based on the implementation that has taken place, the factors that support the follow-up of service activities are the great interest and participation of Partners and group members as well as the Village Head to learn to use existing online communication applications to be able to communicate with the community.

#### 4. CONCLUSION

The results of the service show that there is maximum absorption from farmers in applying the application of silage feed processing technology, improving farmers' skills in making silage by utilizing available resources in large quantities, and increasing farmers' understanding in utilizing the diversification of silage. For the future it is needed the consistency of farmers in making and using silage feed. More in-depth research is also needed regarding the right content and dosage for livestock.

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