

Utilization of Snail Pests into Animal Feed in Desa Tanjung Rejo, Deli Serdang Regency

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Abstract: The paper discussed the potential on utilization of snail pest as animal feed by community in Tanjung Rejo village. The aim of this study is to produce fodder that can be stored for a long time with good quality for ranchers. The method used is a combination method of counseling, training, direct practice and job evaluation. The procedure is divided into four stages. First: manufacture of cooked snail flour, in which the snails are salted and boiled and then gouged out the meat to separate it from the shell. Second: manufacture of raw snail flour, where the snail meat is separated from the shell and cut into small pieces, dried, then ground finely. Third: manufacture of snail shell flour by drying, crushing, grinding and sieving. Fourth: Preparation of poultry feed, by mixing snail flour with a ratio 1:4 of snail flour and fine bran; for snail shell flour the comparison of snail shell flour and fine bran is 1: 3. The outcome is ready to be used as animal feed. All feeds produced can be used for the community need or can be sold, especially by the farmers and ranchers of Tanjung Rejo village. Snail-crushing machine has been given by USU community service team to Farmers and Ranchers Group.

1 INTRODUCTION

Deli Serdang Regency is one of regencies in Sumatera Utara characterized with potential fishery and marine resources. The coastal area is around 63,002 Ha consists of 4 Sub-districts, namely: Labuhan Deli, Hamparan Perak, Percut Sei Tuan and Pantai Labu. Percut Sei Tuan is one of many potential subdistricts that need to be developed through the management of coastal areas, especially Tanjung Rejo village.

Tanjung Rejo, located in Deli Serdang Regency is a development coastal area of East Coast of North Sumatera where the most people work as fishermen. Recently, there has been a decline in activity of fishing due to limited resources that affected the fishermen to switch professions into farmers or ranchers.

Agricultural farmers in Tanjung Rejo usually grow rice paddy field. Paddy production is disrupted due to the large number of snail pests in their fields. One alternative to reduce the snail pest is by utilize it into animal feed. Conversion of snail pest into animal feed will benefit most ranchers in Tanjung Rejo as

they tend to breed chickens, ducks and cattle. Additionally, practical procedure of snail pest utilization has never been taught before in this village. Farming and livestock products can only meet the daily needs if there is sufficient resources of animal feed. Since the production process for both farming and raising livestock requires large cost, farmers and ranchers are faced into two challenges between borrowing loan money to provide the animal feed or utilizing abundant resources available as animal feed.

The benefit of this activity is to help the people of Tanjung Rejo village in utilizing animal feed and introduce the culture of snail pest utilization in daily life to reduce dependence on commercial feed which is relatively expensive for ranchers, while for farmers to reduce pests that disturb their rice. The feed can be used directly or even sold to improve economic income of community in Tanjung Rejo.

2 MATERIALS AND METHODS

The method used in this study is counseling, lecturing, implementing practical theory and

technique of snail pest utilization to groups of farmer and rancher in Tanjung Rejo Village. The community gained the knowledge submitted by the community service team.

The practical theory and technique was implemented in the form of training to Farmers and Ranchers Group in Tanjung Rejo Village. Community groups are trained by professional implementors or trainers. All activities are conducted and managed step by step to get effective result. In addition, organic fertilizer and tools namely snail-crushing machine are provided for the training and future usage.

Monitoring and evaluation upon success of snail pests utilization are achieved by witnessing in the field directly whether the community are able to perform the procedure effectively. In addition, the community activity are also monitored via phone to to overcome several problems that arise during practical implementation.

In general, our activities were considered as success since there is a good cooperation between universities, especially the trainers, government officials and farmers/ranchers community in Tanjung Rejo Village. The people of Tanjung Rejo Village realize the importance of preserving the environment while improving their livelihoods by producing their own animal feeds. Standard diagrammatic procedure of utilizing snail pest as animal feed is produced from this study.

3 RESULTS AND DISCUSSION

Deli Serdang Regency has 65 km long beach area. Along the beach, the potential of coastal areas is within 15 villages and 711,663 inhabitants. Coastal villages are located in 4 Sub-districts are shown in Table 1.

Table 1. Coastal Villages in the Four District of Deli Serdang District

No	Coastal Village	Wide area (Km)	Total population (Soul)	Number of Fishermen (people)	Information
I.	Hampan Perak Sub-D				
1.	Paluh Manan	18,93	11.059	618	wide : 230.15 km Total population = 112,967
2.	Paluh Kurau	32,50	2.421	268	
3.	Sei Baharu	8,00	4.504	149	
4.	Lama Kp. Lama	5.09	2.684	264	
5.	Hampan Perak	9.00	3.975	37	
II.	Labuhan Deli Sub-D				
1.	Karang Gading	66.35	4.246	291	wide : 127.23 km Total population = 45,261
2.	Pematang Johar	20.00	11.640	98	
III.	Percut Sei Tuan Sub-D				
1.	Tanjung Rejo	19.00	7.164	208	wide : 190.79 km Total population = 249,989
2.	Percut	10.63	10.422	653	
3.	Pem. Lalang	20,10	20.55	50	
4.	Tanjung Selamat	16,33	40.59	12	
IV.	Percut Sub-D				
1.	Paluh sibaji	1,37	2.548	1.174	wide : 81.85 km Total population = 38,205
2.	Deni Kuala	4,59	1.751	28	
3.	Bagan Serdang	1,68	1.028	643	
4.	Regemuk	3,00	1.773	693	
5.	Sei Tuan	14,00	170	16	

The success of community service activities cannot be separated from the participation and support of village officials such as Tanjung Rejo Village Chief

and staff, farmers and ranchers groups that participate in this activity.

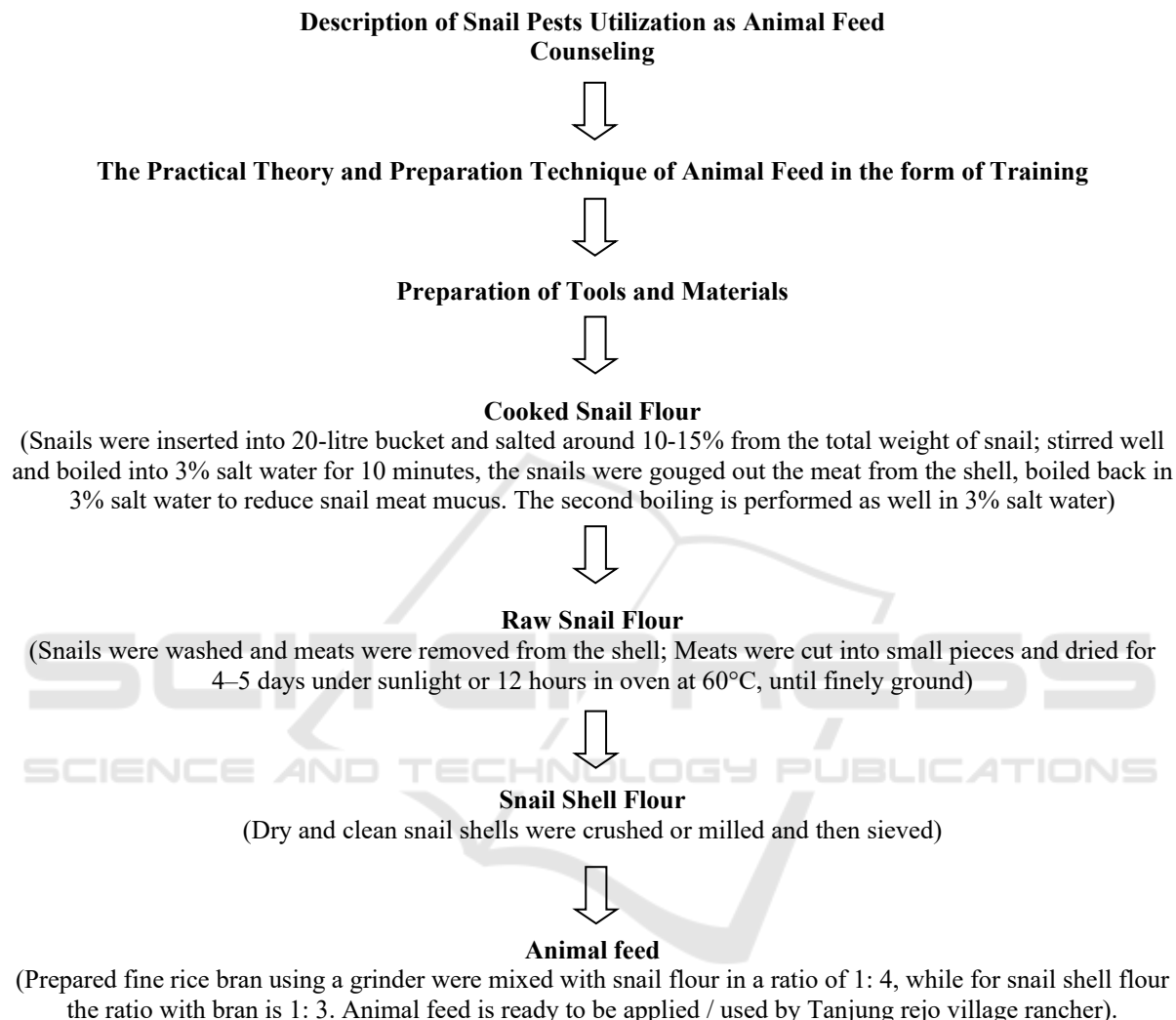


Figure 1. Flowchart of snail pest utilization in Tanjung Rejo

Implementation of activities were carried out by way of counseling and lecturing, explanation of the theory and techniques of snail pest, followed by community groups in the village of Tanjung Rejo Deli Serdang District. Villagers listened to the material presented by the community service team. The material presented about the benefits of snail pests as animal feed. It is expected that community groups can reduce the cost of household production because they can produce their own animal feed according to their needs. So community groups can save the environment and improve their standard of living. The training was done by community groups

in Tanjung Rejo village and trained by a community service team. All activities were conducted proactively to obtain results in the form of organic fertilizer and animal feed from rice brans. Results are seen directly for the utilization of snail pests within a few days. Equipment such as snail shredder / grinder has also been given so that farmer and rancher groups can make their own.

Utilization of snail pests are very supportive because snail pest is very abundant especially during growing or planting season in Tanjung Rejo village, so people will have access for animal feed material. In addition, the village environment can be saved

from the paddy pests while improving living standards because it can make their own animal feed.

The making of animal feed does not require a long time to become the product, because the process is only conducted for a few hours although preparation is made conventionally within 5 days. So community groups should have technical use and utilization.

4 CONCLUSIONS

The utilization of snail pest can be converted to be animal feed, which can enhance economical and ecological value, and to maintain a good relationship between USU and its community in Tanjung Rejo village of Deli Serdang Regency.

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