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Small Ruminant - CRSP

SUB-DALAI PENELITIAN TERNAK, SUNGAI PUTIH
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PUSAT PENELITIAN DAN PENGEMBANGAN PETERNAKAN

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**EVALUATION OF ANTHELMINTIC DISTRIBUTION
BY THE ANIMAL HEALTH DELIVERY NETWORK (AHDN)
IN GALANG AND ITS VICINITY**

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EVALUATION OF ANTHELMINTIC DISTRIBUTION BY THE ANIMAL HEALTH
DELIVERY NETWORK (AHDN) IN GALANG AND ITS VICINITY

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ABSTRACT

In Galang Sub-district, North Sumatra, the Animal Health Delivery Network (AHDN) channels anthelmintic from wholesalers to farmers through the SR-CRSP extension worker, Sub-district Livestock Service extension workers, penggalas (small ruminant trader) and a poultry shop. However, only the SR-CRSP extension worker and penggalas succeeded in distributing anthelmintic.

The SR-CRSP extension worker distributed more anthelmintic (73.9%) than the penggalas did (26.1%) as the SR-CRSP extension worker had been recognized longer by farmers than the penggalas and the penggalas had relatively few opportunities to dispense anthelmintic. Farmers did not buy anthelmintic from the poultry shop because they had not been informed that the shop sold anthelmintic.

Most of the farmers used the anthelmintic because the farmers wished to see healthier sheep. Some farmers (26.5%) who bought drug from the extension worker had used the anthelmintic for more than two years, but all farmers who bought drug from the trader had used anthelmintic just for three months.

Farmers were reluctant to apply anthelmintic themselves and they rely on treatment by the extension worker or trader mostly because they did not know how to use the anthelmintic.

Farmers perceived that after anthelmintic treatment their sheep looked fatter, healthier and cleaner.

Farmers were aware of the helminth problem and willing to use anthelmintic. They did not have enough knowledge of anthelmintic application, so training for the farmers would be essential. Farmers should be informed of the availability of anthelmintic at the poultry shop.

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EVALUASI TENTANG DISTRIBUSI OBAT CACING OLEH ANIMAL HEALTH DELIVERY NETWORK (AHDN) DI GALANG DAN SEKITARNYA

ABSTRAK

Animal Health Delivery Network (AHDN) menyalurkan obat cacing dari pedagang besar ke petani melalui penyuluh SR-CRSP, penyuluh-penyuluh Dinas Peternakan tingkat kecamatan, penggalas (pedagang perantara kambing dan domba) dan toko-unggas. Hanya penyuluh SR-CRSP dan penggalas yang berhasil menyalurkan obat cacing tersebut.

Penyuluh SR-CRSP mendistribusikan lebih banyak obat cacing (73,9%) daripada penggalas (26,1%) karena penyuluh SR-CRSP telah dikenal lebih lama daripada penggalas dan lebih kecil kesempatan bagi penggalas dalam mendistribusikan obat. Petani tidak membeli obat cacing dari toko unggas karena mereka kurang memperoleh informasi bahwa toko unggas juga menjual obat cacing (untuk domba).

Pada umumnya petani menggunakan obat cacing karena ingin melihat domba mereka sehat. Petani (26,5%) yang membeli obat cacing dari penyuluh telah menggunakan obat cacing sejak dua tahun yang lalu, sedangkan petani yang membeli obat cacing dari penggalas baru menggunakannya sejak tiga bulan yang lalu.

Petani enggan memberikan sendiri obat cacing kepada ternaknya dan lebih mempercayakan pemberian obat cacing tersebut kepada penyuluh atau penggalas karena pada umumnya mereka kurang memahami bagaimana cara memberikan obat cacing.

Petani berpendapat bahwa setelah diberikan obat cacing domba mereka kelihatan lebih sehat, lebih gemuk dan lebih bersih.

Petani menyadari masalah kecacingan dan bersedia menggunakan obat cacing. Mereka kurang berpengalaman dalam hal pemberian obat cacing sehingga pelatihan bagi petani sangat diperlukan. Petani juga harus lebih banyak diberi informasi tentang ketersediaan obat cacing di toko unggas.

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INTRODUCTION

Although sheep rearing in Galang and its vicinity now is at subsistence level, most of the ORP and some non-ORP farmers recognize the benefits of using anthelmintics. To provide farmers in the field with anthelmintics at a reasonable price, SR-CRSP/SBPT is developing an Animal Health Delivery Network (AHDN).

This survey evaluates farmers' responses to the anthelmintic distribution by AHDN.

METHODOLOGY

A survey was conducted by interviewing farmers and anthelmintic suppliers followed by a direct observation on sheep performance after treatment of anthelmintic. Four anthelmintic suppliers were designated as respondents in this survey. They were namely, Suwondo (penggalas or goat and sheep trader in Galang), U.D. Sihotang (poultry shop in Galang), Jeplin Sihombing (SR-CRSP extension worker), and Sudijana (Dinas Peternakan extension worker). However, Sudiyana was very busy with his main job as extension worker so he had not enough time to dispense the anthelmintics. Meanwhile, there was no buyer for anthelmintic from U.D. Sihotang as at the same time farmers were busy at work in their paddy fields so the farmers had no time to buy the anthelmintics. Therefore, there were only two anthelmintic suppliers, namely Jeplin Sihombing and Suwondo. Respondent farmers then were divided into two groups: (1) farmers who bought drugs from SR-CRSP extension worker (BDFE) and (2) farmers who bought drugs from trader (BDFT). Forty six ORP and non-ORP farmers participated in this survey, of which 34 were BDFE and 12 were BDFT.

RESULTS AND DISCUSSION

Although both SR-CRSP extension worker's and penggalas' mainjobs were not disturbed by dispensing the anthelmintic, the SR-extension worker distributed more (73.9 %) than penggalas did (26.1%). The reasons for this were: (a) as anthelmintic supplier, SR-CRSP extension worker had been recognized longer by farmers than the penggalas, and (b) the penggalas had relatively less opportunity to dispense anthelmintics than the extension worker did, as the penggalas covers a wide area to perform his main job to collect goats and sheep at the villages.

Reasons for using anthelmintic

Farmers understood quite well the importance of anthelmintic application to their sheep. Most of the farmers (42.5%) used the anthelmintics because the farmers wished to see healthier sheep (Table 1).

Table 1. Farmers' reason in using anthelmintic

<u>Reasons</u>	<u>BDFE (%)</u>	<u>BDFT (%)</u>
Wish to see a healthier sheep as told by the drug suppliers	42.5	71.4
Want to eradicate worms	30.0	21.4
Have seen so many worms within sheep	22.5	0
Have seen the effect of the drug on sheep performance	0	7.2
Expect more productive sheep	2.5	0
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Total	100	100

How long have farmers used anthelmintic?

How long have farmers used anthelmintic? Since traders sold the drug to farmers for the first time, all farmers bought drugs from trader (BDFT) had used anthelmintic for three months. Some farmers (26.5%) bought drug from extension worker (BDFE) had used the anthelmintic for more than two years (Table 2).

Table 2. Length of use of anthelmintic by by farmers

<u>Time (months)</u>	<u>BDFE (%)</u>	<u>BDFT (%)</u>
3	17.6	100
6	14.6	
9	5.9	
12	14.7	
15	11.8	
18	5.8	
24	3.0	
> 24	26.5	
	-----	-----
Total	100	100

Reasons for not buying anthelmintic from poultry shop

Although anthelmintic are available at the poultry shop in Galang, farmers did not buy anthelmintic from the poultry shop but they did from extension worker or trader. The reason for not buying the anthelmintic from the poultry shop was because the farmers had not been informed. Table 3 indicates reasons for not buying anthelmintic from the poultry shop.

Table 3. Reasons for not buying anthelmintic from poultry shop

<u>Reasons</u>	<u>BDFE (%)</u>	<u>BDFT (%)</u>
Had no information	41.0	100
Not enough time to go to poultry shop	15.4	
Did not know about anthelmintic quality	10.3	
Did not know how to use anthelmint.	10.3	
Afraid of missing the schedule of treatment	7.7	
Too expensive if have to buy 1 liter	7.7	
By a routine visit of extension worker farmer will get new information	2.5	
Did not think he could apply the anthelmintic by himself	5.1	
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Total	100	100

Farmers' reasons for not buying the anthelmintic from the poultry shop were mostly because of no information (41% BDFE) and 100 % BDFT). We need to give farmers more information about sources of anthelmintic.

Why farmers did not treat their sheep by themselves?

Farmers were reluctant to apply anthelmintic themselves. They preferred to rely on the treatment on the extension worker or trader mostly because they did not know how to use the anthelmintic (63.2 % and 92.3 % for BDFE and BDFT, respectively) although farmers had already been trained in using the anthelmintic (Table 4).

Table 4. Reasons for not applying anthelmintic by themselves

<u>Reasons</u>	<u>BDFE (%)</u>	<u>BDFT (%)</u>
Did not know how to apply	63.2	92.3
Not satisfied if treating by himself	15.8	
Not enough time	10.4	
No knowledge of anthelmintics	5.3	7.7
Afraid of missing the schedule of treatment	5.3	
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Total	100	100

Changes of sheep performance as perceived by farmers

The effects of anthelmintic treatment to sheep as perceived by farmers are depicted on Table 5.

Table 5. Changes of sheep performance as perceived by farmers

<u>Changes</u>	<u>BDFE (%)</u>	<u>BDFT (%)</u>
Sheep looked fatter, healthier, and cleaner	43.1	26.3
Sheep's appetite increases	24.2	42.1
Faster growing	8.6	10.5
Decrease in sick and morbid sheep	5.2	
Sheep were never sick	17.2	15.8
Farmers did not see any changes	1.7	5.3
	-----	-----
Total	100	100

Why farmers chose extension worker or trader?

Since there were only two drugs suppliers, namely the extension worker and trader, it was interesting to know why farmers chose the extension worker or trader as their supplier (Table 6 and Table 7), while the costs of anthelmintic treatment asked by SR-CRSP extension worker and the trader were Rp 300-Rp 500, respectively.

Tabel 6. Farmers' reasons for choosing extension worker as drug supplier

<u>Reasons</u>	<u>(%)</u>
Got information from ORP farmers and have seen that sheep performance was good	35.2
Anthelmintic available upon credit	5.4
Has been a member of SR-CRSP for years	24.3
Being informed by non-ORP farmer	16.2
Incidentally met the extension worker at the shop	2.7
Has known the extension worker before	5.4
More confidence in the extension worker	5.4
Lives not far away from the extension worker	5.4

Tabel 7. Farmers' reasons for choosing trader as drug supplier

<u>Reasons</u>	<u>(%)</u>
The trader visits the farmer frequently while asking for sheep or goat to trade	56.2
The trader offers the anthelmintics	6.3
Has been looking for the drugs for a long time	25
Has known the trader already	12.5

Total	100

CONCLUSIONS

1. Farmers were aware of the helminth problem and willing to use anthelmintic. They did not have enough knowledge of anthelmintic application, so training for the farmers would be essential.
2. Farmers should be informed more on the availability of the anthelmintic at the poultry shop.