

## **An Investigation on the Spreading of the Silage Production in Turkey: An Example for the Administration of Agricultural Directorate of Tekirdag Province**

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**Abstract:** Around the problems and success during the spreading of the innovations of the agricultural office of the province Tekirdag to determine 89 agricultural engineers of the agricultural office became Tekirdag and 153 farmers to who cultivation of maize silage was taught asks. In the case of this investigation the success of the advisors affecting factors became like as well as professional experience, satisfaction, communication with other advisory resembles conferences with teaching the agricultural techniques until the future of the maize silage farmers like acknowledgment and preparation to maize silage animal and resembles mixtures, future for each kind that seized.

**Key words:** Tekirdag Province, Maize Silage

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### **INTRODUCTION**

The features of research workers Fourth one percent of population 41% in Turkey are earning their life from crop and animal production. 1/3 of population are earning their life from animal production [1]. This figure is covered by 3.6% of agricultural enterprises which are dealing with animal production only of total product. Agriculture of operation with has above or equal them heat of animal is estimated 6.6% go of total animal production operations [2-4].

Turkey is rank eight in number of cattle of the world. This figure is third in OECD countries. On the contrary members of animals have very low productivity. A great progress has been obtained in recent years. Turkish cattle population is consisted of 15.7% of exotic western breeds, 42.6% cross breed and 41.7% native breed. But in western part of Turkey the percentage of pure breed and cross breed western cattle breeds were reached almost 95%. But in east and southern part of Turkey still has mostly native breeds [4-6].

In order to have proper animal husbandry it is a necessary to improve feeding conditions together with genetic improved of native breeds. Animal production is mostly basic on poor pasture and insufficient storage basic on poor pasture and insufficient storage and grass with low nutritive values in Turkey.

Especially intensive dairy cattle operations are practicing more usage of concentrates than the other type of animal husbandry. It can be observed that the animal feed production is increased from 6.000 tone (1960) to 218.000 tone (1970). This figures were reached 5.6 million tone (1998). But not having with self efficient feed preparation facilities. Farmers are suffering from cost of concentrate. This trend is

negatively influenced to the development of animal production. The palate is almost one of price of concentrates. So it is concluded that farmers should have the ability of to prepare their feeds rather than to buy from feed factory. It is also necessary to expand the usage of silage making. Animal breeders in lacking of enough experience and knowledge of feed silage making. The agriculture extension institutions either public or private can be examined.

These groups are consisted of agricultural input marketing cooperatives, public institutions, pilot extension projects with external sources. It is aimed to evaluate the efforts which are done by provincial directorate of agricultural production in order to make farmers capable of making silage in their production activities [7].

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### **MATERIALS AND METHODS**

Data were obtained from result of interview and questionnaire of extensions specialist of provincial directorate of agricultural extension specialists responsible for the training of farmer for silage making. Eight village were chosen out of 12 village, were used in this experiment. One hundred fifty three dairy farms were chosen as a material by the result of formula of  $n = Npq / (N-1)D + pq$

### **RESULTS**

The feature of extension Specialist The 3/4 of extension specialist feel themselves to be successful in perceiving

Table 1: The Features of Farmers Perceived for Silage

Ages	%age
-35	21.6
36-55	65.4
56 +	13.1
Education level	
No education	7.2
Elementary school	51.0
Middle School	14.4
High School	19.6
University	7.8
Agriculture Land (Decares)	
- 100	30.7
101 – 200	36.6
201 – 300	14.4
301 +	18.3
Number of Cow	
- 2	40.5
3 – 4	34.6
5 – 6	13.1
7 +	11.8

Making innovation to the farmers according to the result obtained.

The 51.7% extension specialists were in lower level of experienced with below 9 years professional experiences.

The 44.9% of specialist were lower than 30 years old. The 82.1% of specialist were satisfied with their profession. The 62.9% and 65.2% of specialists have used printed materials and seminars respectively for their professional developments. The 92.2% and 84.3% of specialists had bilateral professional contacts with high rank and middle level of administrative decision makers respectively.

It was concluded from the data that not using enough printed materials and attending, had negative effect on the perceivedness of innovations and successes. Seminars and not having bilateral information contact with authorities responsible for decision making were determined. It was also shown that the rural roots of specialists were the self confidence of specialist and enough professional bilateral contact with decision makers for silage making were the positive factors influencing perceivedness of new techniques.

**The Features of Farmers:** The 65.4% of farmers were the range of 36-55 years old. The young farmers with lower age than 35 years old was 21.6% of farmers while above were 56 years old. It was observed that 51% of farmers graduated from Elementary School, 7.2% of farmers had no education, 14.4 and 19.6% of farmers graduated middle school and university (Table 1).

Table 2: Acceptability and Perceivedness of Techniques Recommended for Silage Making

Techniques Recommended	Ratio of Perceivedness
Silos Pool	
1. Soil Silo	86.4
2. Semi hole silo	13.6
3. Width of soil silo	64.0
4. The distance between silo and with respect to labor stable	0.0
5. To make silo for unoxxygen conditions	100.0
6. Slope of silo base is 1-2%	95.0
Silage Making Step	
1. Chopping green Forage	100.0
2. 70% moisture of starting material	100.0
3. Silage additives	43.7
4. Length for maturity of silage	45.7
5. Cutting techniques	87.4
Attentions on giving Silage to Animals	
1. Transport of silage from silage cut to walking parlor	55.3
2. Giving silage before milking	45.6
3. Waiting period of excessive silage (2 days)	63.1
4. Avoiding to give silage yeast with mould	100.0
5. To follow limitation rules for silage	5.8
6. Availability of salt and source of chalk	55.3
7. Silage allowance according to the features of the cows	18.4
8. Daily silage allowance for dairy cow	57.3
9. Daily silage allowance for fattening cow	49.5
10. Daily silage recommended for calf and heifer	37.9
11. Daily silage allowance for breeding stuck	75.7
12. Mixing rate of silage and forage	29.1

The size of land of opportunity of Trakya farmers are above the Turkish average. The 36.6% of farmers had land of 1011-200 decares. The farmers with lower than 100 decares land were 30.7% of farmers. Farmers with land one of 200-300 decares were 30.7% of the farmers. The number of farmers with above 301 decares land were 18.3% of the farmers who have more farming land.

But it is critical that 40.5% of operations standardized medium scale operations according to Turkish average one of land had 2 head of cattle. 11.8% medium scale operations had seven or above head of dairy cows per farmer.

**The Perceive ness of Silage Production:** The most important factor to evaluate the efficiency of agriculture extension specialist was considered the acceptance and perceive ness of farmers for silage making.

According to the results obtained, 86.4 and 13.6% of farmer preferred ground lever soil silo and semi hole silo respectively. Concrete, steel and iron silos were not perceived by the farmers. The three criteria out of (8) were perceived by farmers (Table 2).

The 43.7% of farmers had no information regarding silage additives while the 75% of farmers had enough knowledge on the concept of silage maturity. The 87.4% of farmers had enough information on the importance of cutting and chopping and moisture percent of silage raw materials. For practice out of five recommended by specialist were perceived 50% of farmers were not familiar with concepts of silage odare milk and knowledge of giving silage to cattles. It is concluded that two aspects out of 12 concepts regarding usage of silage recommended by extension specialist were assumed to be perceived by farmers (Table 2).

It shows that specialist were effective only in making silage rather than using in feeding practices. This argued that this trend may diminish the popularity and spreading the silage by farmers. It's also fedred that this may result the abundance of farmers for making silage.

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