Milk Quality Consciousness Among the Small Holder Dairy Farmers in Ambedakar Nagar District of Uttar Pradesh

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Abstract

Awareness about the good quality milk in necessary not only due to reason that a large fraction of milk produces in India is domestically consumed and it has direct relation with the health of that large milk consuming population but also to increase acceptability of Indian milk in international market. Present study was purposively conducted in Ambedakar Nagar district of Uttar Pradesh. For the study 78 small holder dairy farmers were selected. During study it was found that majority of the small holder dairy farmers have medium to low level of consciousness about the quality of good milk. There is need for increasing milk quality consciousness among the dairy farmers by educating about it.

Keywords: Small Holder Dairy Farmers; Milk Quality; Adulteration; Flavor of Milk; Color of Milk.

Introduction

Milk is the cheapest source of protein for the large vegetarian population of India. Milk is also nutrient rich media and act as complete food. India is largest milk producing country. Its milk production for year 2016-17 was 165.4 mmt. India is second most populous country in the world. However, producing largest amount of milk and currently per capita milk availability in 355 gms/day (BAHS, 2017) but export of milk and milk products to other countries is very low. In the age of globalization and liberalization competition in dairy sector becomes very intense. In India still 80% of the milk is handled by unorganized sector. Quality of milk in Indian market remains uncertain because majority of dairy farmers were small holder and cannot affords dairy technologies. Quality uncertainty of milk not only make Indian dairy farmers devoid of large fraction of remunerative profit but also it is directly associated with the health risk of large milk and milk product consuming population in country. Poor quality milk may lead to serious health related issues. Quality consciousness among the dairy farmers because major crux for the development of a dairy sector. So, it is of paramount importance to

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know the quality consciousness among the small holder dairy farmers. The study was conducted with objective to assess the quality consciousness among the dairy farmers.

Material and methods

The study was conducted in Uttar Pradesh purposively because it is not only the highest milk producing state (BAHS, 2017) but also it has a large population depend on livestock beside agriculture for their livelihood security. For the study 78 small holder dairy farmers were selected from Ambedakar Nagar district through proportionate random sampling method in different land holding category. A well tested milk quality consciousness schedule was developed for milk quality. Milk quality consciousness were measured as mean score obtained by dairy farmers for all milk productions.

Result and Discussion

Result related to quality consciousness about milk among the small holder dairy farmers is presented in Table 1 revealed that majority of the respondents (74.36%) were found aware about

Table 1: Distribution of respondents according to their consciousness about different parameter of milk quality.

Parameters	Respondents (<i>f</i>) One adulterant	n=78	
Name the adulterant of the milk and milk products		Two adulterant	More than two adulterant
	8 (10.26)	12 (15.38)	58 (74.36)
Whether or not adulterated milk clot after boiling.	Clot after boiling	Do not know	
	49 (62.82)	29 (37.17)	
Fresh and good quality milk remain sick to the surface without any precipitates of the utensils pouring off that utensil	Yes	Do not know	
	42 (53.84)	36 (46.15)	
There is formation of cream layer on the surface of pure milk when left for some time.	Yes	Do not know	
	56 (71.79)	22 (28.21)	
pH of milk	Acidic	Slight acidic	Basic
	22 (28.20)	19 (24.36)	37 (47.44)
Pure milk not coagulate on heating	Yes	Do not know	
	28 (35.90)	50 (64.10)	
Chemical residues in milk may come in milk after.	High use of chemical like herbicides and pesticides for fodder production	Use of drugs in treatment	Do not know
	17 (21.79)	20 (25.64)	41 (52.56)
Smell of fresh milk	Sweetish milky	Others	
	41 (52.56)	37 (47.44)	
Color of fresh milk	White to milky yellow	Others	
	46 (58.97)	32 (41.03)	

Figure presented in parenthesis represents percentage

Table 2. Mean score distribution of respondents according to theiroverall consciousness about milk quality.

Quality consciousness category	Respondents(n=78)		
	Frequency (f)	Percentage	
Low (<0.44)	29	37.18	
Medium (0.45 to 0.78)	45	57.69	
High (>0.78)	04	05.13	

more than two adulterant of milk. It was found that they were known about thickening agents like cane sugar, starch, vegetables oils etc. Beside this water is well known as general adulterant for all the farmers. Suruchi (2012) and Tiwari (2016) also reported that majority of the respondents were aware about the milk adulterant.

It was also found that a fair number of respondents (30.77%) were aware about the fact that poor quality milk got clot after boiling. Clot on boiling is a plate farm test for milk and a considerable incidence of clot on boiling were also reported by Nirwal et.al. (2013). Majority of producers (53.85%) was also aware about the fact that after pouring out the milk from utensils there should not be precipitation on the surface of utensil. However a very less fraction of respondents were found aware about the pH value of the fresh milk. Slight acidic nature of milk from dairy farms were also asserted by Indumathi and Obula Reddy (2015). It was found that only (30.77%) of respondents were aware about slight acidic nature of milk. Chemical residues in the milk are one of the major quality issues, which show the effect on immunity status of the consumers. Slightly less than half (47.44%) of the respondents were know about the chemical residues in milk which was comes in milk either due to indiscriminate use of chemicals during fodder production and drug use for treatment of animals. However majority of the respondents were known about smell and color of fresh milk.

The result of overall quality consciousness about the milk among the small holder dairy farmers is present in Table 2. It reveals that majority (57.69%) of the respondents were in the medium level of awareness about the milk quality consciousness followed by a considerable numbers of respondents (37.18%) were in low level of quality consciousness about the milk.

Conclusion

It was found that majority of small holder dairy farmers were in medium to low level of quality consciousness about the milk. There need to create awareness among the small holder dairy farmers about presence of chemical residues, pH level and different adulterants. There awareness can be created by organizing awareness campaign, Kisan gosthi etc.in the regions.

Conflict of Interest

The authors declare no conflict of interest with this manuscript.

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