

ADOPTION OF CLEAN MILK PRODUCTION PRACTICES BY THE DAIRY FARMERS

Nirali H Usadadiya¹ and R. R. Prajapati²

¹ M.Sc. Scholar, Dept. of Agricultural Extension and Communication, SDAU, Sardarkrushinagar-385506

² Assistant Professor and Head, Dept. of Agricultural Extension and Communication, Sardarkrushinagar-385506

Email: nirali81998@gmail.com

ABSTRACT

Clean milk production does not mean making the milk free from extraneous matters like dust, dirt, flies etc. by passing it through sieve or muslin cloth. It actually means the raw milk that has been produced in the udder of healthy dairy animals, handled under hygienic conditions and contains only allowed quantity of bacteria and chemical residues. Clean milk can be defined as milk coming from healthy milch animal, possessing normal flavor, devoid of dirt and filth, containing permissible limit of bacteria and essentially free from adulterants, pathogens, various toxins, abnormal residues, pollutants and metabolites (Ogale, 1999). The present investigation was carried out in North Gujarat. Three districts of North Gujarat viz., Banaskantha, Sabarkantha and Mehsana were purposively selected for the study. From each selected district, three talukas and two villages from each selected taluka were randomly selected for the study. Thus, eighteen villages were selected from the nine selected talukas. For selection of the respondents from the villages, a village wise list of dairy farmers was prepared based on farmers having two animals of which one animal in milking stage. From each village, ten dairy farmers were randomly selected as respondents. Thus, total 180 respondents were selected for the study. Majority (85.00 %) of the dairy farmers had medium to high extent of adoption of clean milk production practices.

Keywords: adoption, clean milk production, dairy farmers

INTRODUCTION

Dairy farming has been an important part of the agricultural scenario for thousands of years (Khunt *et al.*, 2022). India being a predominantly agrarian economy has about 70 per cent of its population living in villages, where livestock play a crucial role in the socio-economic life. Livestock provide high-quality foods such as milk, cheese, butter, ghee, etc. India is not only one of the top producers of milk in the world, but also the largest consumer of milk and milk products in the world. Due to the shortfall in supply, we have to import significant amounts of milk products to meet internal demand. Agriculture and animal husbandry have a symbiotic relationship, in which the agricultural sector provides feed and fodder for the livestock and animals provide milk, manure and draught power for various agricultural operations. Dairy sector is instrumental in bringing socio-economic transformation in India. It has created a lot of employment opportunities and also provides improved nutritional benefits. In clean milk production, milking is the key operation on a dairy farm. Milking is an art requiring experience and skill. Milking should be conducted gently, quietly, quickly, cleanly and completely. Cleanliness of animal sheds, cleanliness of animals, cleanliness of milkers and milking pails, milking methods, transportation of milk

from dairy farm to processing units are important operations to adopt by the dairy farmers.

The domestic milk production could be increased in terms of quantity and quality with adoption of Good Dairy Farming Practices (FAO, 2011). Milk quality is utmost important factor in dairying today due to consumer's awareness regarding "Quality". Although, India ranks first in milk production, quality of milk produced is not satisfactory due to lack of technical knowledge to the farmers (Ogale, 1999).

OBJECTIVES

- (1) To study the adoption of clean milk production practices by the dairy farmers
- (2) To ascertain the relationship between selected characteristics of the dairy farmers and their adoption of clean milk production practices

METHODOLOGY

The present study was carried out in North Gujarat. Out of six districts of North Gujarat, three districts were purposively selected. From each selected district, three talukas were selected randomly. Thus, total nine talukas were

selected from the three selected districts. Two villages from each selected taluka were randomly selected for the study. Thus, eighteen villages were selected from the nine selected talukas for the study. From each village ten dairy farmers were randomly selected as respondents for the study. Thus, total 180 respondents were selected for the study. Ex-Post-Facto research design was used in the present study (Kerlinger, 1976). The data were collected through pre-tested Gujarati interview schedule and investigator contacted all the data personally. The data were gathered, processed and analyzed to draw the meaningful conclusion. The statistical tools used for the analysis of the data were percentage, mean, standard deviation, correlation coefficient.

RESULTS AND DISCUSSION

Adoption of clean milk production practices by the dairy farmers

Table 1 : Extent of adoption of clean milk production practices (n = 180)

Sr. No.	Extent of adoption	Frequency	Per cent
1	Low (below 37.25 score)	27	15.00
2	Medium (37.25 to 46.93 score)	121	67.22
3	High (above 46.93 score)	32	17.78

It is obvious from the data presented in Table 1. that little more than two-thirds (67.22 per cent) of the dairy farmers had adopted the clean milk production practices at medium extent. While, 17.78 and 15.00 per cent of the dairy farmers had adopted the clean milk production practices at high and low extent, respectively.

Relationship between selected characteristics of the dairy farmers and their adoption of clean milk production practices

Based on the assumption that the adoption of clean milk production practices by the dairy farmers is influenced by various variables viz., age, education, experience in dairy farming, size of family, herd size, annual income, land holding, extension participation, source of information, risk orientation and economic motivation, a conceptual model was formulated considering eleventh independent variables, which have relevance on adoption level. When the model was empirically tested, in adoption level it was observed that the variable viz., education, experience in dairy farming, herd size, annual income, extension participation, source of information, risk orientation, economic motivation had positive and significant relationship with extent of adoption of clean milk production practices. Age, size of family, land holding had not-significant relationship with extent of adoption of clean milk production practices.

Table 2 : Relationship between selected characteristics of the dairy farmers and their adoption of clean milk production practices (n = 180)

Sr. No.	Independent variable	Correlation-Coefficient ('r' value)
X ₁	Age	-0.0396 ^{NS}
X ₂	Education	0.2000 ^{**}
X ₃	Experience in dairy farming	0.1634 [*]
X ₄	Size of family	0.1321 ^{NS}
X ₅	Herd size	0.1497 [*]
X ₆	Annual income	0.1492 [*]
X ₇	Landholding	0.0706 ^{NS}
X ₈	Extension participation	0.1996 ^{**}
X ₉	Source of information	0.1876 [*]
X ₁₀	Risk orientation	0.1967 ^{**}
X ₁₁	Economic motivation	0.1935 ^{**}

^{NS} = Non significance ^{*} = 5 % level of significance

^{**} = 1 % level of significance

CONCLUSION

For ongoing discussion, with view to adoption of clean milk production practices, it can be concluded that majority (85.00 %) of the dairy farmers had medium to high extent of adoption of clean milk production practices. The probable reason behind above finding might be good dairy farming experience, literacy level and good extension participation by the dairy farmers.

CONFLICT OF INTEREST

This is to declare that there is "No conflict of interest" among researcher.

REFERENCES

- FAO and IDF. (2011). Guide to Good Dairy Farming Practice. Animal Production and Health Guidelines. No. 8. Rome.
- Kerlinger, F. N. (1976). *Foundation of Behavioural Research*. Surjeet Publication, New Delhi, 198-204.
- Khunt, K. R., Kanani, P. R. and Jadav, N. B. (2022). Assessment of knowledge of farm women about clean milk production practices. *Guj. J. Ext. Edu.*, 34(2):106-109.
- Ogale, H. (1999). Clean milk production the key to quality management in dairy industry. *Indian Dairyman*. 51(6): 41-43.