

Original Research Article

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Perceptions of Dairy Farmers Regarding Self-made and Branded Feed in Punjab

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ABSTRACT

Keywords

Branded, Dairy,
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The present study was conducted on randomly selected 240 dairy farmers from Punjab contacted at various Kissan melas, Trainings, KVKs and seminars. 129 dairy farmers who were preparing self-made feed were selected as final respondents. The farmers were asked to rank reasons for likings of self-made feed and disliking of branded feed from 1st rank to 8th rank according to Garret's ranking technique on pre-selected reasons, which were compiled after scrutinizing relevant literature, consulting subject matter specialist and progressive farmers. 'Performance of dairy animals', 'Quality issue' and 'Costly feed' were reported to be reasons at 1st, 2nd and 3rd rank respectively for not buying branded feed. 'Performance', 'Choice of ingredients' and 'milk production' were reported to be reasons at 1st, 2nd and 3rd rank respectively for preparing self made feed. The commercial feed miller should consider these reasons, which were according to farmers' point of view for enhancing their market potential and to increase acceptability of branded feed by dairy farmers.

Introduction

Present-day high-producing dairy animals are the result of years of genetic improvement programmes. Dairy animals require nutrients for maintenance, growth, foetus development and milk production. Concentrates, important feed constituents are main sources of energy and protein, low in fiber, high in dry matter content and contain minerals that cannot be met from forage alone. In dairy farming, 60-70% expenditure was reported to be on concentrates. The poor concentrate feed (inadequate in both quality and quantity) is a

major constraint in efforts to improve the productivity of dairy animals. Dairy farmers are either providing self-made concentrate feed or are dependent on branded/market feed. The feed industry has attempted to encourage the dairy farmers to feed branded concentrate and thus preventing farmers from making concentrate at their farms. However, the branded feed was introduced to enable dairy farmers to use higher technology levels, which may not be available to individuals in the farm. Branded feed will also help farmers to focus more on herd management issues instead of spending time on purchasing raw

materials, mineral supplements and other components (Abdollahi *et al.*, 2013). The various advantages with self-made feed were increasing farm efficiency by using on-farm by-products, reducing the cost of production where homemade rations are cheaper than branded feed. However, disadvantages with self-made feed were difficulty in maintaining quality control and balancing the ration because some ingredients may not be available, difficult to mix homogeneously, especially for the ingredients used in small amounts, as mixing is done manually (Kitalyi *et al.*, 2020). In Punjab, study regarding perception of dairy farmers regarding reasons for preferring branded feed or self made feed is not there.

Materials and Methods

The present study was conducted on randomly selected 240 dairy farmers of Punjab. The farmers were asked about preference of feed either self made or market/commercial feed. Out of 240 dairy farmers, 129 (53.75 %) were reported to be preferring self-made feed. These final respondents (n=129) preparing self made feed were interviewed personally with the help of interview schedule. The interview schedule consisted of eight reasons for not buying branded feed and eight reasons for preferring self made feed.

These reasons were compiled after consultation with subject matter expert, relevant literature and after discussion with progressive dairy farmers. The dairy farmers were asked to rank these reasons in to rank order 1st to 8th according to quantum of effect on their dairy animals and on dairy farming. Garrett's Ranking technique (Garret and Woodworth, 1969) was used to evaluate these reasons given by dairy farmers. The orders of merit given by the dairy farmers were converted in to rank. The outcomes of such ranking have been converted into score value

by following Garrett (1981) method, with the help of the following formula:

$$\text{Per cent position} = \frac{100 (\text{Rij} - 0.5)}{\text{Nj}}$$

Where Rij = Rank given for the ith variable by jth respondents

Nj = Number of variable ranked by jth respondents

With the help of Garrett's ranking conversion table 1, the estimated percent position is converted into Garret value. For individual rank order of individual reason, the Garret's score is calculated by multiplying number of dairy farmer falling under particular rank category with Garret value. Then for each rank, the scores of dairy farmers were added and then total value of scores and average values of score is calculated. The reason having highest average value is considered to be the most important reason cited by dairy farmer.

Results and Discussion

Table 2 represents the ranking order of dairy farmers of Punjab for not buying branded feed. For 1st reason i.e. 'Costly feed', 29 dairy farmers placed it on 1st rank and 39 dairy farmers placed it on 5th rank, while for 6th, 7th and 8th rank none of the farmer have given preferences. For 'Quality issue' reason, 29 dairy farmers placed it on 1st rank.

Table 3 explains the calculation of Garrett's value and final ranking of reasons for not buying branded feed. 'Performance', 'Quality issue' and 'Costly feed' were reported to be at 1st, 2nd and 3rd rank respectively. It means that dairy farmers of Punjab are more concerned with performance of dairy animals after feeding the branded feed. The Quality issue of branded feed was also highlighted by dairy

farmers, indicating the existence of low performance and spurious quality branded feed in the market. So, all branded feeds are not resulting in good performance of dairy animals and some may have quality issue with them. The ‘Availability’ reason was placed by farmers at last i.e. 8th rank (Figure 1), indicating that branded feed is easily available for the farmers. It suggests that commercial feed companies are making arrangements for easy availability of branded feed to the dairy farmers. Sometimes, the commercial feed companies are providing incentives, giving advertisement, providing facility for home

delivery of branded feed for easy availability at doorstep of farmer. However, John and Manoj (2013) reported that price, convenience, availability and quality are the major factors influencing the purchase decision of farmers for branded feed in Kerala. The branded/commercial feed companies should plan marketing strategies according to the preferences of farmers. John and Manoj (2014) also observed that meticulously planned and carefully designed marketing strategies are vital for sustained business growth and profitability of cattle feed manufacturers.

Table.1 Garrett value for each per cent position from Garret ranking conversion table

| Rank | $100(R_{ij}-0.5)/N_j$ | Percent Position | Garret Value |
|------|-----------------------|------------------|--------------|
| 1 | $100(1-0.5)/8$ | 6.25 | 80 |
| 2 | $100(2-0.5)/8$ | 18.75 | 67 |
| 3 | $100(3-0.5)/8$ | 31.25 | 60 |
| 4 | $100(4-0.5)/8$ | 43.75 | 53 |
| 5 | $100(5-0.5)/8$ | 56.25 | 47 |
| 6 | $100(6-0.5)/8$ | 68.75 | 40 |
| 7 | $100(7-0.5)/8$ | 81.25 | 32 |
| 8 | $100(8-0.5)/8$ | 93.75 | 20 |

Table.2 Ranking order of dairy farmers of Punjab (n=129) for reasons for not buying branded feed in Garret’s ranking technique

| Attributes | Rank order | | | | | | | |
|-----------------|------------|-----|-----|-----------------|-----|-----|-----|-----|
| | 1st | 2nd | 3rd | 4 th | 5th | 6th | 7th | 8th |
| Costly feed | 29 | 0 | 31 | 30 | 39 | 0 | 0 | 0 |
| Quality issue | 29 | 0 | 29 | 40 | 31 | 0 | 0 | 0 |
| Availability | 0 | 0 | 0 | 0 | 37 | 0 | 29 | 63 |
| Performance | 39 | 58 | 0 | 0 | 0 | 0 | 32 | 0 |
| Fat or gravity | 0 | 0 | 0 | 0 | 57 | 72 | 0 | 0 |
| Repeatability | 0 | 0 | 28 | 32 | 0 | 0 | 40 | 29 |
| Milk production | 32 | 0 | 39 | 0 | 0 | 39 | 7 | 12 |
| Conception | 0 | 72 | 0 | 29 | 0 | 0 | 28 | 0 |

Table.3 Calculation of Garret value and ranking of dairy farmers (n=129) for not buying branded feed

| Attributes | Rank order | | | | | | | | Total score | Mean Score | Rank |
|-----------------|------------|------|------|------|------|------|------|------|-------------|------------|------|
| | 1st | 2nd | 3rd | 4th | 5th | 6th | 7th | 8th | | | |
| Costly feed | 2320 | 0 | 1860 | 1590 | 1833 | 0 | 0 | 0 | 7603 | 58.94 | III |
| Quality issue | 2320 | 0 | 1740 | 2120 | 1457 | 0 | 0 | 0 | 7637 | 59.20 | II |
| Availability | 0 | 0 | 0 | 0 | 1739 | 0 | 928 | 1260 | 3927 | 30.44 | VIII |
| Performance | 3120 | 3886 | 0 | 0 | 0 | 0 | 1024 | 0 | 8030 | 62.25 | I |
| Fat or gravity | 0 | 0 | 0 | 0 | 2679 | 2880 | 0 | 0 | 5559 | 43.09 | VI |
| Repeatability | 0 | 0 | 1680 | 1696 | 0 | 0 | 1280 | 580 | 5236 | 40.58 | VII |
| Milk production | 2560 | 0 | 2340 | 0 | 0 | 1560 | 224 | 240 | 6924 | 57.73 | IV |
| Conception | 0 | 4824 | 0 | 1537 | 0 | 0 | 896 | 0 | 7257 | 56.26 | V |

Table.4 Ranking order of dairy farmers of Punjab (n=129) for reasons for preparing self made feed in Garret’s ranking technique

| Attributes | Rank order | | | | | | | |
|-----------------------|------------|-----|-----|-----------------|-----|-----|-----|-----|
| | 1st | 2nd | 3rd | 4 th | 5th | 6th | 7th | 8th |
| In front of eyes | 57 | 0 | 0 | 0 | 0 | 32 | 0 | 40 |
| Choice of ingredients | 0 | 98 | 0 | 0 | 31 | 0 | 0 | 0 |
| Cheaper | 39 | 0 | 0 | 0 | 0 | 58 | 0 | 32 |
| Performance | 32 | 0 | 68 | 29 | 0 | 0 | 0 | 0 |
| Fat or gravity | 0 | 0 | 28 | 0 | 0 | 0 | 101 | 0 |
| Repeatability | 0 | 0 | 0 | 72 | 0 | 0 | 0 | 57 |
| Milk production | 0 | 32 | 0 | 30 | 67 | 0 | 0 | 0 |
| Conception | 0 | 0 | 31 | 0 | 29 | 40 | 29 | 0 |

Table.5 Calculation of Garret value and ranking of dairy farmers (n=129) for preparing self made feed

| Attributes | Rank order | | | | | | | | Total score | Mean Score | Rank |
|-----------------------|------------|------|------|------|------|------|------|------|-------------|------------|------|
| | 1st | 2nd | 3rd | 4th | 5th | 6th | 7th | 8th | | | |
| In front of eyes | 4560 | 0 | 0 | 0 | 0 | 1280 | 0 | 800 | 6640 | 51.47 | IV |
| Choice Of Ingredients | 0 | 6566 | 0 | 0 | 1457 | 0 | 0 | 0 | 8023 | 62.19 | II |
| Cheaper | 3120 | 0 | 0 | 0 | 0 | 2320 | 0 | 640 | 6080 | 47.13 | V |
| Performance | 2560 | 0 | 4080 | 1537 | 0 | 0 | 0 | 0 | 8177 | 63.39 | I |
| Fat or gravity | 0 | 0 | 1680 | 0 | 0 | 0 | 3232 | 0 | 4912 | 38.08 | VIII |
| Repeatability | 0 | 0 | 0 | 3816 | 0 | 0 | 0 | 1140 | 4956 | 38.42 | VII |
| Milk production | 0 | 2144 | 0 | 1590 | 3149 | 0 | 0 | 0 | 6883 | 53.36 | III |
| Conception | 0 | 0 | 1860 | 0 | 1363 | 1600 | 928 | 0 | 5751 | 44.58 | VI |

Fig.1 Reasons for not buying branded feed by dairy farmers of Punjab (n=129)

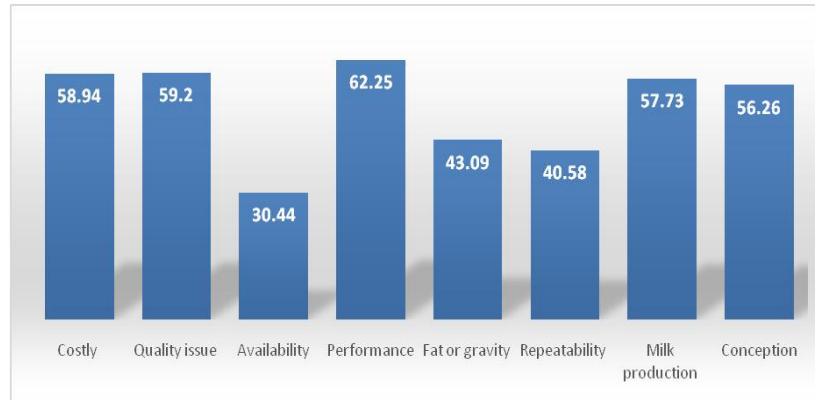


Fig.2 Reasons for preparing self made feed by dairy farmers of Punjab (n=129)

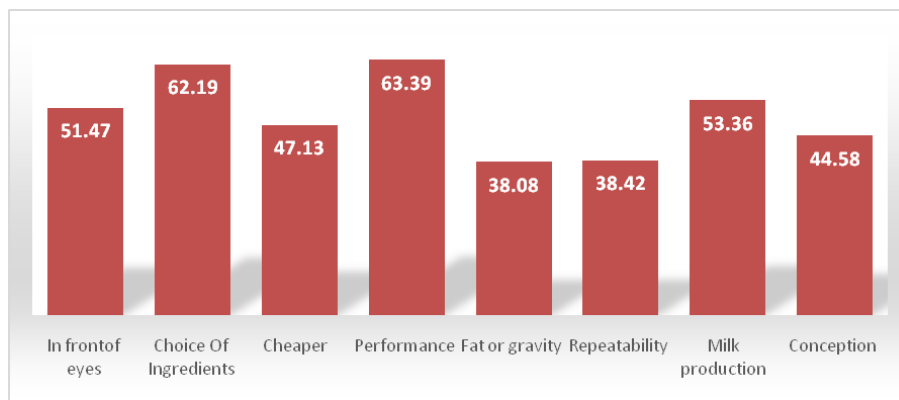


Table 4 represents the ranking order of dairy farmers of Punjab for reasons for preferences of preparation of self made feed. For reason ‘In front of eyes’, 57 dairy farmers placed it on 1st rank, while 80 dairy farmers placed it on 8th rank. For reason ‘Conception’, 31 dairy farmers placed it on 3rd rank, while 29 dairy farmers placed it on 7th rank.

Table 5 explains the calculation of Garrett’s value and final ranking of reasons for preparing self made feed. ‘Performance’, ‘Choice of ingredients’ and ‘milk production’ were reported to be at 1st, 2nd and 3rd rank respectively. It suggests that performance of dairy animal is of utmost concern for the dairy farmer for preparing self made/homemade feed. The self made feed might be giving good performance, resulting

in more faith of the farmers. So, the branded feed companies should concentrate on performance of dairy animals, while formulating animal feed. Varmudy V (2012) also has observed that India has enough opportunities to meet the new market demands, but there needs to be an improvement in the health and productivity of farm animals. ‘Choice of ingredient’ was also a major reason perceived by dairy farmers for preparation of self made feed. It indicates that by making self made feed, the dairy farmer is able to incorporate easily available, cheap and good quality ingredients in to animal feed. Fat or specific gravity was placed at last i.e. 8th rank (Figure 2). This indicates that dairy farmers were less concerned about fat or specific gravity.

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