DEVELOPMENT OF SCALE TO MEASURE THE ATTITUDE OF FARMERS TOWARDS KANKAREJ COW

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ABSTRACT

The study was conducted to develop and standardize the reliable and valid scale, to measure attitude of farmers towards Kankarej cow. Appropriate statistical methods 'Scale product method' was used, which combines Thurston and Likert techniques. Twenty statements were selected for judgment; a panel of 50 judges was requested to assign the score for each statement on five point continuum. Based on the scale (median) and Q values, **ten statements were finally selected** to constitute attitude of farmers towards Kankarej cow.

Keywords: *attitude, farmers, kankarej cow, scale product method.*

INTRODUCTION

The *Kankarej cattle* are a native of Kankarej town in Banaskantha district of North Gujarat and are named after the same. It is also known by the names Bannai, Nagar, Talabda, Vaghiyar, Wagad, Waged, Vadhiyar, Wadhiar, Wadhir, and Wadial. It is one of the best dual purpose breed of India because it is useful for agricultural operations and road transport in village. Milk yield is 1700-1900 Kg. Fat content in milk is 4.5 to 5.0 %. Calving interval is 13 - 21 months. Lactation period is 325 days and dry period is 60 days.
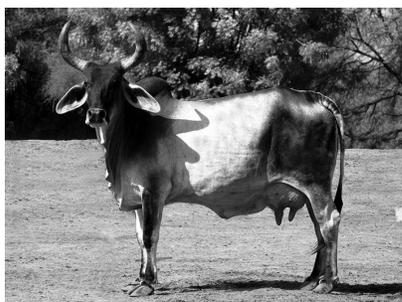
METHODOLOGY

In the present study attitude is operationalized as positive or negative feeling of farmers towards rearing of Kankarej cow**.** Among the techniques available 'Scale product method' which combines the Thurston's technique (1928) of equal appearing interval scale for selection of items and Likert's technique (1932) of summated rating for ascertaining the response on the scale as proposed by Eysenck and Crown (1949) and *Darji* (2017) was used.

Item Collection

The items of attitude scale are called as statements. In initial stage, 20 statements reflecting feelings of the farmers towards Kankarej cow were collected from relevant literature and discussion with experts of extension discipline. The collected statements were edited according to the criteria laid down by Edward (1957) and then 20 statements were selected as they were found to be unambiguous.

Item Analysis

In order to judge the degree of 'Unfavorableness' to 'Favorableness' of each statement on the five point equal appearing interval continuum, a panel of judges was selected. Fifty slips of the selected statements were handed over to the experts connected with extension educational work. The judges were requested to judge each statement in terms of their most agreement or most disagreement with the statements with the five equal appearing interval continuums. Out of these experts, all the experts returned the statements after duly recording their judgments and were considered for the analysis.

Determination of scale and 'Q' values

Frequency distribution of the judges based on responses in five continuums was prepared. On the bases of judgment, the median value of the distribution and 'Q', Q_3 and Q_1 value for each of 20 statements were calculated. The inter-

quartile range ($Q = Q_3 - Q_1$) for each statement was worked out for determination of ambiguity involve in the statement. Only those items were selected whose median (scale) values were greater than Q values. However, when a few items had the same scale values, items having lowest Q value were selected. Based on this, 8 statements were finally selected to constitute attitude scale. The selected 8 statements for final format of the attitude scale were randomly arranged to avoid response bias. The final format of the scale is presented in Table: 1.

Table 1 : Final selected statements to measure attitude of farmers towards Kankarej cow

No	Statements	Scale Value	Q value
1	Adopting Kankarej cow is the wise approach to get better income.	1.94	1.05
2	I understand that Kankarej cow keeping is expensive.	2.86	1.90
3	I think that Kankarej is competent cow to get higher milk production.	2.40	1.96
4	I visualize limited scopes of Kankarej as compared to foreign breeds.	3.39	2.09
5	I believe that Kankarej is the best dual purpose breed for milch and agricultural work.	1.80	1.16
6	I think that wise animal keeper is one, who keeps Kankarej cow in India.	2.40	1.49
7	I think raising Kankarej cow is practical only in the North Gujarat.	3.00	1.86
8	I feel that raising Kankarej cow is feasible to even common farmer	2.10	0.83

Reliability of the scale

To know the consistency of the scale, reliability was worked out. The split-half technique was used to measure the reliability of the scale. Selected 98attitudinal statements were divided into two equal halves with 4 (four) odd and 4 (Four) even numbered statements. Each of the two sets was treated as separate scales having obtained two score, for each of the 20 respondents. Co-efficient of reliability between the two sets of score was calculated by Rulon's formula (Guilford 1954), which was 0.74.

Validity of the scale

The validity of content of scale was examined by discussing with specialists of the extension and statistics. Specialists examined and realized appropriateness of the each statement to measure the feeling of farmers towards Kankarej cow for which the scale is developed.

Administration of the scale (Scoring technique)

For application of the scale, the researcher can collect information against each 8 statements in five point continuum viz. 'Strongly agree', 'Agree', 'Undecided', 'Disagree' and 'Strongly disagree' with weighted score of 5,4,3,2 and 1 for positive and reverse to negative statements.

CONCLUSION :

From the various methods available for constructing the attitude scale, scale product method' which combines the Thurstone's technique of equal appearing interval scale, for selection of items and Likert's technique of summated rating for ascertaining the response on the scale as proposed by Eysenck and Crown was used to measure the attitude of farmers towards Kankarej cow.

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