

DEVELOPMENT OF SCALE TO MEASURE ATTITUDE OF DEMONSTRATED PADDY GROWERS TOWARDS SRI TECHNIQUE OF PADDY CROP

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ABSTRACT

SRI technique of paddy cultivation has potential to achieve higher yield at lower cost of production along with saving of water and therefore it is desirable on part of paddy growers to adopt SRI technique. Adoption of SRI technique becomes easier once the paddy growers cultivate favorable attitude towards that. In this context, effort was made to develop and standardize the scale to measure attitude of demonstrated paddy growers towards SRI technique of paddy cultivation.

INTRODUCTION

SRI (System of Rice Intensification) technology of paddy cultivation is innovative one and is of interest because of its potential to achieve higher yield at lower cost of production along with saving of water. Considering the importance of this new technology, demonstrations to paddy growers were given by Main Rice Research Station, Nawagam, Anand Agricultural University to paddy growing farmers of nearby area. In this regard, effort was made to construct and standardize the scale to measure the attitude of these demonstrated paddy growing farmers towards SRI technique.

METHODOLOGY

Among the techniques available for construction of scale, the methodology suggested by Likert (1932) and Edward (1957) was used in this study. The technique chosen to construct the attitude scale was of "Scale Product Method" which combines the technique of Equal Appearing Interval Scale of Thurston (1946) for selection of the items and Likert's techniques of summated rating for ascertaining the response on the scale.

1 Item collection

The items making up an attitude scale are known as statements. A statement may be defined as anything that is said about a psychological object. As a first step in the developing the scale, large number of statements about SRI technique were collected from the relevant literature and discussion through experts of SRI technique and Extension personnel. The statements thus collected were edited on the basis of the suggested criteria and finally 19 statements were selected for scale construction.

2 Judge's rating of attitude statements

In order to judge the degree of "Unfavorableness" to "Favorableness" of each statement on the five point equal appearing interval continuum, a panel of 50 judges was selected. The judges selected for the study comprised Extension educationist, Agronomists and experts with considerable practical experience in SRI technique from the Anand Agricultural University and Navsari Agricultural University. The judges were visited personally along with letter of instructions to guide them for rating the statements

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3 Determination of scale and quartile value

The five points of the rating scale were assigned scores ranging from 1 for most unfavorable and 5 for most favourable. On the base of judgment, the median value of the distribution and the Q value for the statement concerned was calculated, the inter-quartile range ($Q = Q3 - Q1$) for each statement was also worked out for determination of ambiguity involved in the statement.

4 Final statements for attitude scale

When there was a good agreement among the judges in judging the degree of agreement or

disagreement of a statement, Q was smaller compared to the value obtained; and when there was relatively little agreement among the judges, it was reverse. 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 the median and Q values, 10 statements were finally selected to constitute attitude scale which is presented in Table-1. The scale values were ranging from 1.3 to 4.5 with 0.5 class intervals.

Table-1: Final statements of the scale to measure attitude of the Demonstrated paddy growers towards SRI technique.

Sr. No.	Final Statement	SA	A	UD	D	SDA
1	In my opinion, SRI technique in paddy cultivation gives higher yield.					
2	I think that application of SRI technique in paddy cultivation is complicated.					
3	In my opinion, more skills are necessary in SRI technique.					
4	The application of SRI technique in paddy is very risky.					
5	It is easy to adopt SRI technique in paddy cultivation.					
6	I think, the yield in SRI technique is more as compared to conventional method.					
7	The use of SRI technique is wastage of money.					
8	SRI technique cannot be adopted by the illiterate paddy growers.					
9	SRI technique is better way for sustainable agriculture.					
10	In my opinion, SRI technique is more laborious.					

SA = strongly agree, A = agree, UD = un decided, D = disagree, SD = strongly disagree

5 Reliability of the scale

A scale is reliable when it consistently produces the same results when applied to the same sample. In the present study, split-half method of testing reliability was used. The 10 statements were divided into two halves with five odd numbered statements in one half and other five even numbered statements in the other. These were administered to 25 respondents. Each of the two sets of statements was treated as a separate scale

and then these two sub-scales were correlated. The co-efficient of reliability was calculated by the Rulon's formula (Guilford, 1954), which came to 0.86.

6 Content validity of the scale

The present scale satisfied the content Validity as the content (statements) was determined through thorough discussion with extension educationists, academicians and experts with practical experiences of SRI technique.

7 Scoring system

By using this scale, the responses can be collected on five points continuum viz, strongly agree, agree, undecided, disagree and strongly disagree with respective weights of 5, 4, 3, 2, and 1 for favourable statements and with respective weights of 1, 2, 3, 4 and 5 for the unfavourable statements.

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Attitudes that stifle innovation

It might not work

We haven't got me time for that now

You can't do that !

What's the point - they never listen anyway.

If it's that good an idea, why hasn't been done already ?

It's not company policy

Stop asking questions and do what you're told

What if my manager doesn't like it ?

Your / I'm here to do, not think

It's always been like that

we're not ready for it