**Original Research Article**

Development of a Scale to Measure Empowerment of Rural women in Karnataka – Mgnrega Programme

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**Abstract**

Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) 2005 is one of the world’s largest public invest programme that is being enforced in all the states and UTs within the country. MGNREGA could be a distinctive government programme that directly aimed to produce guarantee employment to the worthy individuals of the rural area. The other unique aspect is its potential for women empowerment in the rural India. This characteristic of the scheme is incredibly important as India will increase its annual gross domestic product by $ two.9 trillion by 2025 by rising gender parity and fascinating the complete potential of its women workforce. An attempt is being made in the study to construct a scale to measure the empowerment of rural women. In the study, Women empowerment of MGNREGA programme is operationally defined as “status of social progressiveness, economic improvement and psychological advancement of women beneficiaries of MGNREGA. Further, it refers to multidimensional process to enable women to realize their identity and powers in all spheres of life. The method of scoring was followed in the construction of women empowerment scale. The scale developed was found to be reliable and valid. The women empowerment scale developed was administered to 30 MGNREGA Beneficiaries in non sample area of Mysuru district of Karnataka state during 2019. As a result, 45 statements were identified to have significant contribution towards women empowerment of MGNREGA programme. The scale would be essential to conduct further studies in particular areas of research.

**Keywords**

Women empowerment, Reliability, Validity, MGNREGA

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**Introduction**

Agriculture continues to be the mainstay of our country’s economy. Nearly eighty five per cent of the population lives in rural areas. Majority of the agricultural families rely on agriculture and allied activities for his or her bread and butter. The growth of the country’s economy and success of financial condition alleviation efforts for the most part rely on agricultural performance. In India, farm women represent important a very important workforce in agriculture and allied sectors and are vital to the well being of farm households. A large number of women from rural area are engaged in farm operations as cultivators, assistants to male cultivators or as agricultural laborers. On fifth Sep 2005, National Rural Employment Guarantee Act was enacted. It was modified as Mahatma...
Gandhi National Rural Employment Guarantee Act on 2nd February 2006 and it is now frequently referred as Mahatma Gandhi NREGA or MGNREGA. MGNREGA being a wage employment programme recognizes employment of hundred days as a legal right. (Chakrabrati 2007). Women empowerment being necessary objective of this act, stress was arranged on promoting gender equality through providing wage employment to women. Women empowerment thus is method that enables women to possess access and management of assorted factors necessary for his or her economic independence and social development (Das and Mishra 2002). Keeping these aspects the present research study is formulated with the following specific objective. To develop a scale to measure the empowerment of rural women of MGNREGA Beneficiaries in Karnataka.

Materials and Methods

Women empowerment of MGNREGA programme is operationally defined as “status of social progressiveness, economic improvement and psychological advancement of women beneficiaries of MGNREGA. Further, it refers to multidimensional process to enable women to realize their identity and powers in all spheres of life. The method suggested by the Likert (1932) and Edwards (1969) in developing summated rating scale was followed through six stages viz., identification of dimensions, collection of items/statements, relevancy test, item analysis, reliability and validity. The following points were considered for measuring the women empowerment of MGNREGA Beneficiaries.

Identification of Dimensions

Three major dimensions and nine sub dimensions related to Women empowerment were identified based on review of literature and discussion with experts in the field of extension education. The identified dimensions are Social empowerment, Communication skill, Decision making power, Leadership skill, Economic Empowerment, Annual income, Food consumption pattern, Access to credit, Psychological Empowerment, Attitude towards programme, Role of perception and Desire for control. The identified dimensions along with number of statements initially selected under each dimension were given in Table 1.

Collection of Items / Statements

A large number of draft statements on each dimension of women empowerment were collected based on review of literature, discussion with relevant specialists and researcher’s own experience. These statements were carefully edited, revised and restructured to avoid ambiguity and duplication. Thus, 85 statements including negative statements were selected for further analysis.

Relevancy test

The selected 65 statements were so worded so as to express varying degrees of women empowerment of MGNREGA beneficiaries. These statements were then subjected to scrutiny by an expert panel of judges to determine their relevancy and subsequent screening of items for their inclusion in the final scale. A questionnaire consisting of all the items was posted with enclosed self addressed and stamped envelope also e-mailed to 91 judges comprising of Assistant Professors (those who had minimum of 3 years experience), Associate Professors, Professors, scientists, extension personnel of State Agricultural Universities, Deemed universities, National institutes such as NIRD and MANAGE and ICAR institutes with
appropriate instructions to critically judge the items for their relevancy in measuring women empowerment of MGNREGA programme. They were asked to check each of the statements carefully for being relevant or not relevant using four point continuum viz., ‘Most Relevant’ (MR), ‘Relevant’ (R), ‘Some What Relevant’ (SWR) and ‘Not Relevant’ (NR) with scores of 3, 2, 1, and 0, respectively. The judges were also requested to make necessary modifications and additions or deletion of statements, if they desire so. The relevancy score for each item was found out by adding the relevancy scores of the rating given by 54 judges, who replied in time. These were considered for further processing.

The responses of the judges were tabulated and data were analyzed to work out Relevancy Percentage (RP), Relevancy Weightage (RW) and Mean Relevancy Score (MRS) for all the statements as follows.

i. Relevancy Percentage (RP): It was obtained by the standard formula which is given below.

\[
\text{Relevancy Percentage (RP)} = \frac{(MR \times 3) + (R \times 2) + (SWR \times 1)}{\text{Maximum possible score (i.e. } 54 \times 3 = 162)} \times 100
\]

ii. Relevancy Weightage (RW): Relevancy weightage was calculated by using following standard formula.

\[
\text{Relevancy Weightage (RW)} = \frac{(MR \times 3) + (R \times 2) + (SWR \times 1)}{\text{Maximum possible score (i.e. } 54 \times 3 = 162)}
\]

iii. Mean Relevancy Score (MRS): The mean relevancy score was obtained by the following standard formula.

\[
\text{Mean Relevancy Score (MRS)} = \frac{(MR \times 3) + (R \times 2) + (SWR \times 1)}{\text{Number of judges responded (i.e. 54)}}
\]

Using these three criteria the items were screened for their relevancy. Accordingly, the items having relevancy percentage of more than 75.00 per cent, relevancy weightage of more than 0.75 and mean relevancy score of more than 3.00 were considered for the inclusion in item analysis. Thus, 45 statements were retained out of 54 statements.

**Item analysis**

The responses of the respondents with respect to the different statements were subjected for difference in highest and lowest responses based on the t-test was done.

\[
t = \frac{\bar{X}_H - \bar{X}_L}{\sqrt{\frac{\sum X^2_H}{n_H} - \frac{(\sum X^2_H)^2}{n_H(n_H - 1)}} - \frac{\sum X^2_L}{n_L} - \frac{(\sum X^2_L)^2}{n_L(n_L - 1)}} \]

Where,

\[
\sum X^2_H = \text{Sum of the squares of the individual scores in the high group}
\]

\[
\sum X^2_L = \text{Sum of the squares of the individual scores in the low group}
\]

\[
\bar{X}_H = \text{The mean score for a given statement for the high group}
\]

\[
\bar{X}_L = \text{The mean score for a given statement for the low group}
\]

\[
n = \text{Number of respondents}
\]

The statistical response measured at 5 per cent and 1 per cent were selected as the statements for the final research work. However statistical response found non-significant were deleted. Finally with the above criteria, 45 statements out of 54 for Women Empowerment Scale were finally found appropriate and hence retained for the final scale.
Table 1 Final inclusion of Components under each Dimension of Women Empowerment

| No. | Dimensions   | Components       | Taken | Deleted | Selected for Main study |
|-----|--------------|------------------|-------|---------|-------------------------|
| I   | Social       |                  | 21    | 3       | 18                      |
| II  | Economic     |                  | 19    | 7       | 12                      |
| III | Psychological|                  | 25    | 10      | 15                      |
| Total|              |                  | 65    | 20      | 45                      |

Table 2 Women empowerment scale with 45 statements representing three main and six sub-dimensions

| S.No | Statements                                                                                           | SA | A | UD | DA | SDA |
|------|------------------------------------------------------------------------------------------------------|----|---|----|----|-----|
|      | **A. Social Empowerment**                                                                            |    |   |    |    |     |
|      | **A.I. Communication Skills**                                                                       |    |   |    |    |     |
| 1    | MGNREGA beneficiaries persuades and influences others about self-ideas                               |    |   |    |    |     |
| 2    | Beneficiaries can communicate with bank and MGNREGA officials & others to clarify doubts with patience |    |   |    |    |     |
| 3    | They communicate boldly to demand equal & higher wages on par with men                               |    |   |    |    |     |
| 4    | Interpret others through observation of expressions                                                   |    |   |    |    |     |
| 5    | Raise their voice against caste discrimination                                                        |    |   |    |    |     |
| 6    | Able to protest against gender discrimination                                                         |    |   |    |    |     |
|      | **A.II. Decision Making Power**                                                                      |    |   |    |    |     |
| 7    | Beneficiaries involve in decision making regarding family planning                                    |    |   |    |    |     |
| 8    | Involve in decision of household matter                                                               |    |   |    |    |     |
| 9    | Joint decision in social & educational matters                                                        |    |   |    |    |     |
| 10   | Makes decision on purchasing equipments for entrepreneurial activities                                 |    |   |    |    |     |
| 11   | Participate in training programme for improving individual skills                                      |    |   |    |    |     |
| 12   | Build-up Self-confidence in taking decisions                                                          |    |   |    |    |     |
|      | **A.III. Leadership skills**                                                                         |    |   |    |    |     |
| 13   | Able to raise voice confidently                                                                      |    |   |    |    |     |
| 14   | Able to talk with officials without any hesitation                                                    |    |   |    |    |     |
| 15   | They encourage people participation for better decisions                                               |    |   |    |    |     |
| 16   | Better co-operation with SHGS’s & Gram panchayat members                                               |    |   |    |    |     |
| 17   | Helping in village development                                                                       |    |   |    |    |     |
| 18   | Participation in various social meetings and gram panchayat activities                                 |    |   |    |    |     |
|      | **B. Economic Empowerment**                                                                          |    |   |    |    |     |
| 19   | A beneficiary should work towards economic profit                                                     |    |   |    |    |     |
| 20   | Women should go for additional income generating activities that                                      |    |   |    |    |     |
|   |   |
|---|---|
| 21 | Excessive concentration towards monetary gains changes the individual attitude towards work |
| 22 | Women employees aim should obtain more profits |
| **B.II. Food Consumption pattern** |   |
| 23 | MGNREGA is effective in enhancing the livelihood security in rural areas |
| 24 | MGNREGA helps to meet their day to day family expenses |
| 25 | Improvement in health status |
| 26 | Improvement in dietary diversity and nutrition security |
| **B.III. Access to Credit** |   |
| 27 | Involvement in decision making in your family regarding financial issues |
| 28 | Freedom to take loan from the bank for personal needs |
| 29 | Freedom to keep money out of salary for personal expenditure |
| 30 | It is difficult to bring up children in a better way unless mother and father/ both contribute economically |
| **C. Psychological Empowerment** |   |
| **C.I. Attitude towards Programme** |   |
| 31 | MGNREGA enhances the livelihood security in rural areas |
| 32 | One-third of the beneficiaries are women registered members in MGNREGA |
| 33 | MGNREGA is a demand driven programme |
| 34 | Creation of rural assets is the aim of MGNREGA |
| 35 | Beneficiaries are satisfied with the wages paid |
| 36 | Equal wages are provided to both men and women |
| 37 | A helpline is set up for grievance redressal |
| 38 | Each household is entitled a separate job card |
| **C.II. Role Perception** |   |
| 39 | Economic support by women is crucial for family |
| 40 | Women are not equal to men in performance of farm & entrepreneurial activities |
| 41 | Men can also share household work even if it is women’s responsibilities |
| **C.III. Desire for control** |   |
| 42 | Women should have the right to spend her earnings according to her own priorities |
| 43 | Women should participate in political activities for improving their status |
| 44 | Development programmes for women should be planned based on women’s priorities |
| 45 | Rural women should have right to decide the type of activities required for developing the village |

SA: Strongly Agree    A: Agree    UD: Undecided    DA: Disagree    SDA: Strongly Disagree
Reliability and validity of the scale

The Pilot study was conducted among 30 respondents in non-sample area comprising 45 statements in Women Empowerment scale. Split half method developed by Brown prophecy was employed to measure the reliability of the tools. The reliability coefficient of the Women Empowerment scale was found to 0.9289 which is higher than the standard of 0.70, indicating higher reliability of the scale.

Further, the data were subjected for statistical validity, which was found to be 0.9638 which is greater than the standard requirement of 0.70, hence the validity co-efficient was also found to be most appropriate and suitable for the tool developed.

Results and Discussion

The final scale consisted of 45 statements representing three main and six sub dimensions (Table 2). The responses had to be recorded on a five point continuum representing strongly agree, Agree, Undecided, Disagree and Strongly disagree with scores of 5,4,3,2 and 1, respectively for positive statements and 1, 2, 3, 4 and 5 for negative statements, respectively. The total women empowerment score for each respondent was calculated by summing up scores of all the items. Thus, 45 to 225 were the minimum and maximum possible scores obtainable by the respondents, respectively.

In conclusion the women empowerment scale developed is found to be reliable and valid, hence it can be used to measure the empowerment of rural women towards MGNREGA programme. The developed scale can be measured by researchers to measure women empowerment of MGNREGA beneficiaries. It can be concluded that the scale developed is useful in explicitly measuring women empowerment and their involvement in MGNREGA Programme.

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