

## **Revolutionizing Traditional Crafts: Women-led Innovations in the Cottage Industry**

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### **Abstract**

The primary goal of the research inspects an empowerment of women in cottage industries. The respondents' primary data will be gathered from them using a structured interview schedule. Secondary data will be gathered from a variety of sources, including periodicals, journals, etc. In this study used a sample of 200 respondents from Tirunelveli district with the use of SPSS 20 and AMOS 20 software, the researcher used a reliability test, exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). It was concluded that to develop entrepreneurship skills in the society in educational empowerment followed by fight against superstitions in social empowerment then to understand the activities of women's commission in political empowerment and finally, to market the goods and services in economic empowerment is the highest factors. Initially, the confirmatory factor analysis model did not fit. As per the modification indices one double arrow mark was connected with error to error. After that, the model fit perfectly.

(Keywords: Cottage Industry, Educational Empowerment, Economic Empowerment, Political Empowerment and Social Empowerment)

### **Introduction**

Increased economic, social, political, and educational strength of a person, group, or entity is referred to as women's empowerment. Women's control over financial and intellectual resources is just one example of the numerous facets of empowerment. Many of the demands of female entrepreneurs in rural regions are met by cottage enterprises, which have also created job possibilities for them and prevented the degeneration of their society.

The majority of cottage industries are located in rural areas and focus on handicrafts like handicraft, pottery, knitting, and handloom. It has been observed that women have gained economic independence in rural areas thanks to cottage industry. Women are able to make decisions through cottage industries and contribute to ongoing growth and change; as a result, cottage industries have developed into a channel for the empowerment of female entrepreneurs

## **Review of Literature**

**Samitowska (2011)** examined the contributions, development, and importance of cottage industries to the Polish economy. The survey concluded that considerable financial barriers, such as restricted access to capital and insufficient starting finance, were impeding the growth of entrepreneurship. Because of this, the biggest obstacles facing cottage industries in Poland are a lack of adequate state funding, a lack of assistance from corporate institutions, poor financial resource management, fierce competition between Polish and foreign businesses, Polish law, and administrative bodies.

**SubrahmanyaBala (2011)** examined the influence of globalisation on the export potential of small-scale businesses and came to the conclusion that, even though the growth looked to be modest, the impact increased during the liberalisation phase even though it was considerable during the security period. The government may thus continue to spend in marketing, funding, and infrastructure to boost the output of these SSIs.

**Shihabudheen (2012)** in their study states that Micro businesses are crucial to the global empowerment of women and the development of rural areas, particularly in industrialised nations like India. Micro businesses attempt to create inclusive and equitable urban development with relatively low capital outlays, and They significantly contribute to the socioeconomic development of the disadvantaged and the reduction of poverty. By concentrating on micro firms that are a part of Kerala's government's flagship project to combat poverty, "Kudumbashree," this essay investigates the role of micro enterprises in women's empowerment.

**Merlin Thanga Joy et al. (2013)** in their paper, the authors discuss the economic benefits of cottage industries, which provide jobs for a sizable number of rural residents. The report makes the case that creating cottage industries is the most effective strategy to fight unemployment since our nation is overpopulated. The paper asserts that little is beautiful and

that the government must devise even more initiatives to promote the expansion of cottage industries.

**Srinivas, K., T. (2013)** in their study concluded that Cottage Industries are the country's growth engine, and their role in inclusive development is that of micro, small, and medium-sized businesses. To consolidate this market, there have been numerous reforms at the federal and state levels in recent years. The lack of infrastructure and marketing linkages is the main cause of the cottage industry's slow growth in India. The state and federal governments' support is insufficient for the development of India's cottage industries. As a result, both the government and Indian businesspeople should take action to promote the development of these cottage industries in India.

**Vijay Jariwala (2016)** in their study learn about the challenges and opportunities faced by women entrepreneurs in Dang district who are running successful small businesses. It also looked at motivational causes, as well as woman entrepreneurs' key strengths and weaknesses. The study's results indicate that the challenge is finance marketing products and inadequate resources, as well as the fact that women's education plays a significant role in becoming a woman entrepreneur.

### **Research Methodology**

The primary goal of the research inspect an empowerment of women in cottage industries. The respondents' primary data will be gathered from them using a structured interview schedule. Secondary data will be gathered from a variety of sources, including periodicals, journals, etc. In this study used a sample of 200 respondents from Tirunelveli district with the use of SPSS 20 and AMOS 20 software, the researcher used a reliability test, exploratory factor analysis (EFA) and confirmatory factor analysis (CFA).

### **Data Analysis and Interpretation**

**Table 1 Reliability Test**

| <b>Factors</b>          | <b>No. of variables</b> | <b>Cronbach's Alpha</b> |
|-------------------------|-------------------------|-------------------------|
| Educational Empowerment | 4                       | 0.890                   |
| Social Empowerment      | 4                       | 0.905                   |
| Political Empowerment   | 4                       | 0.863                   |
| Economic Empowerment    | 4                       | 0.824                   |

Source: Primary data

The metric Cronbach alpha has been used to assess the data's reliability. The Cronbach's Alpha for Educational Empowerment is 0.890, Social Empowerment is 0.905, Political Empowerment is 0.863 and Economic Empowerment is 0.824. As per the standards, the value needs to be greater than 0.5. Therefore, it can be said that the data is sufficient.

**Table 2 KMO and Bartlett's Test**

|  |                    |          |
|--|--------------------|----------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |                    | .897     |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square | 1899.062 |
|  | df                 | 120      |
|  | Sig.               | .000     |

Source: Primary Data

The Kaiser-Meyer-Olkin Measure is a metric that determines the sufficiency of the sampling. The KMO test result, 0.897 which is greater than 0.5, can be regarded as excellent and valid for use in data reduction techniques. The Bartlett's test of Sphericity aids in determining whether the factor analysis results are worth while taking into account and whether the research project should continue to be analysed. With a Bartlett's Test of Sphericity significance level of 0.001, it can be concluded that there is a high degree of correlation between the variables, making factor analysis appropriate.

**Table 3**

**Empowerment of Women in Cottage Industry**

| Statements  | Components              |                    |                       |                      |
|---|-------------------------|--------------------|-----------------------|----------------------|
|   | Educational Empowerment | Social Empowerment | Political Empowerment | Economic Empowerment |
| To develop entrepreneurship skills in the society             | .861                    |                    |                       |                      |
| To develop leadership skills in the society                   | .835                    |                    |                       |                      |
| To adopt technological developments                           | .822                    |                    |                       |                      |
| To communicate with one another and exchange life experiences | .806                    |                    |                       |                      |
| To fight against superstitions                                |                         | .884               |                       |                      |
| To work for social equality                                   |                         | .817               |                       |                      |
| To proactively engage in community service                    |                         | .798               |                       |                      |

|  |        |        |       |       |
|--|--------|--------|-------|-------|
| To achieve the goal of Social freedom                                  |        | .794   |       |       |
| To understand the activities of women's commission                     |        |        | .790  |       |
| To participate actively in political activities                        |        |        | .777  |       |
| Understand the importance of adult ownership.                          |        |        | .753  |       |
| To participate actively in elections                                   |        |        | .745  |       |
| To market the goods and services                                       |        |        |       | .811  |
| To gain self-employment opportunities                                  |        |        |       | .782  |
| To achieve the goal of agricultural and cottage industrial development |        |        |       | .730  |
| To improve saving ability  |        |        |       | .708  |
| Eigen value  | 6.548  | 2.710  | 1.491 | 1.015 |
| Percentage of Variation  | 40.926 | 16.938 | 9.319 | 6.346 |

Source: Primary Data

Factor 1 is the combination of four factors and it can be termed as **Educational Empowerment**. The Eigen value of Educational Empowerment is 6.548 with 40.926 % of variance. Factor 1 has very high significant loading on the variable To develop entrepreneurship skills in the society (0.861) and moderately high loading on the variables of To develop leadership skills in the society (0.835), To adopt technological developments (0.822) and To connect with each other and share experiences in life (0.806).

Factor 2 is the combination of four factors and it can be termed as **Social Empowerment**. The Eigen value of Social Empowerment is 2.710 with 16.938 % of variance. Factor 2 has very high significant loading on the variable To fight against superstitions (0.884) and moderately high loading on the variables of To work for social equality (0.817), To actively get involved in social service (0.798) and To achieve the goal of Social freedom (0.794).

Factor 3 is the combination of seven factors and it can be termed as **Political Empowerment**. The Eigen value of Political Empowerment is 1.491 with 9.319% of variance. Factor 3 has very high significant loading on the variable To understand the activities of women's commission (0.790) and moderately high loading on the variables of To participate actively in political activities (0.777), Understand the importance of adult ownership (0.753) and To participate actively in elections (0.745).

Factor 4 is the combination of four factors and it can be termed as **Economic Empowerment**. The Eigen value of Economic Empowerment is 1.015 with 6.346% of

variance. The Economic Empowerment has very high significant loading on the variable To market the goods and services (0.811) and moderately high loading on the variables of To gain self-employment opportunities (0.782), To achieve the goal of agricultural and cottage industrial development (0.730) and To improve saving ability (0.708).

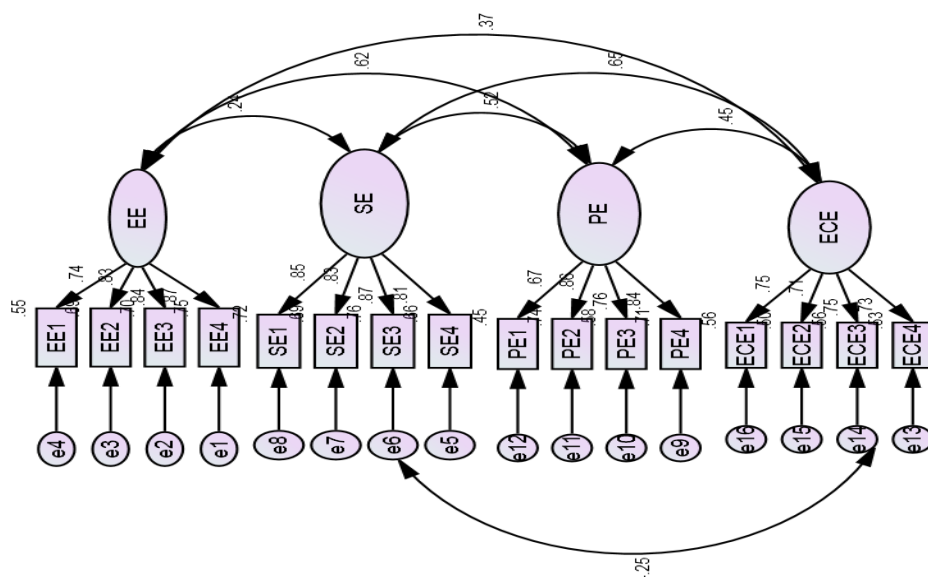
**Table 4 Goodness of fit test for CFA Model**

| Measure | Estimate | Suggested Value               | Interpretation |
|---------|----------|-------------------------------|----------------|
| CMIN/DF | 1.279    | < 5.00 ( Hair et al., 1998)   | Excellent      |
| GFI     | 0.930    | > 0.90 (Hu and Bentler, 1999) | Excellent      |
| AGFI    | 0.901    | > 0.90 ( Hair et al. 2006)    | Excellent      |
| NFI     | 0.937    | > 0.90 (Hu and Bentler, 1999) | Excellent      |
| CFI     | 0.985    | > 0.90 (Daire et al., 2008)   | Excellent      |
| RMSEA   | 0.037    | <0.08 (Hu and Bentler, 1999)  | Excellent      |

Source: Primary data

From the above table it is found that the value of CMIN/DF is 1.279 which is less than 5.00 which indicates perfectly fit. Here Goodness of Fit Index (GFI) value (0.930) and Adjusted Goodness of Fit Index (AGFI) value (0.901) is greater than 0.9 which represent it is a good fit. The calculated Normed Fit Index (NFI) value (0.937) and Comparative Fit Index (CFI) value (0.985) indicates that it is a perfectly fit and also it is found that Root Mean Square Error of Approximation (RMSEA) value is 0.037 which is less than 0.08 which indicated it is perfectly fit.

**CFA Model with Standardized Factor Loading**



Based on the structural model, it is possible to conclude that Educational Empowerment, Social Empowerment, Political Empowerment and Economic Empowerment are statistically significant. Each factor has significant influence with other factors.

**Table 5 Calculation of Average Variance Extracted (AVE) and Construct Reliability (CR)**

|      |      |     | Factor Loading | Item Reliability | Delta | AVE   | Sum of FL | Sum of Delta | CR    |
|------|------|-----|----------------|------------------|-------|-------|-----------|--------------|-------|
| EE4  | <--- | EE  | 0.868          | 0.753            | 0.247 | 0.673 | 3.277     | 1.307        | 0.892 |
| EE3  | <--- | EE  | 0.838          | 0.702            | 0.298 |       |           |              |       |
| EE2  | <--- | EE  | 0.829          | 0.687            | 0.313 |       |           |              |       |
| EE1  | <--- | EE  | 0.742          | 0.551            | 0.449 |       |           |              |       |
| SE4  | <--- | SE  | 0.811          | 0.658            | 0.342 | 0.708 | 3.365     | 1.167        | 0.907 |
| SE3  | <--- | SE  | 0.872          | 0.760            | 0.240 |       |           |              |       |
| SE2  | <--- | SE  | 0.834          | 0.696            | 0.304 |       |           |              |       |
| SE1  | <--- | SE  | 0.848          | 0.719            | 0.281 |       |           |              |       |
| PE4  | <--- | PE  | 0.842          | 0.709            | 0.291 | 0.620 | 3.136     | 1.519        | 0.866 |
| PE3  | <--- | PE  | 0.761          | 0.579            | 0.421 |       |           |              |       |
| PE2  | <--- | PE  | 0.862          | 0.743            | 0.257 |       |           |              |       |
| PE1  | <--- | PE  | 0.671          | 0.450            | 0.550 |       |           |              |       |
| ECE4 | <--- | ECE | 0.727          | 0.529            | 0.471 | 0.539 | 2.937     | 1.842        | 0.824 |
| ECE3 | <--- | ECE | 0.751          | 0.564            | 0.436 |       |           |              |       |
| ECE2 | <--- | ECE | 0.71           | 0.504            | 0.496 |       |           |              |       |
| ECE1 | <--- | ECE | 0.749          | 0.561            | 0.439 |       |           |              |       |

Source: Calculated

The Construct Reliability is the method for assessing the contribution or significance of an item by examining the factors loading. The Construct Reliability (CR) of the four latent factors is greater than 0.70 which indicate good reliability and the value for Average Variance Extracted (AVE) is also greater than 0.50 which indicates adequate Convergent Validity. A high construct reliability indicates that internal consistency exists. The data has good Construct Reliability and Convergent Validity.

**Table 6 Discriminant Validity of Women Empowerment**

| Factors | AVE   | Squared Inter Correlation (SIC) |       |       |       |
|---------|-------|---------------------------------|-------|-------|-------|
|         |       | EE                              | SE    | PE    | ECE   |
| EE      | 0.673 |                                 | 0.056 | 0.387 | 0.135 |
| SE      | 0.708 | 0.056                           |       | 0.275 | 0.428 |
| PE      | 0.62  | 0.387                           | 0.275 |       | 0.198 |
| ECE     | 0.539 | 0.135                           | 0.428 | 0.198 |       |

Source: Calculated

All Average Variance Extracted (AVE) estimates in the above table are larger than the corresponding Squared Interconstruct Correlation (SIC) estimates. This means the indicators have more in common with the factor they are associated with than they do with other factors. Therefore CFA model demonstrates Discriminant Validity.

### **Conclusion**

It was concluded that to develop entrepreneurship skills in the society is the highest loading factor 0.861 in educational empowerment followed by fight against superstitions is the highest loading factor with the value of 0.884 in social empowerment then to understand the activities of women's commission in political empowerment and to market the goods and services in economic empowerment is the highest factor with the value 0.790 and 0.811 respectively. Initially, the confirmatory factor analysis model did not fit. As per the modification indices one double arrow mark was connected with error to error. After that, the model fit perfectly.

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