The Role of Rural Women in Promoting Small Industries as an Example of Socio-Economic Activities: An Overview on the Japanese Experience

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We determined the social, economical variables affecting the level of women’s socio-economic participation and aimed to introduce some suggestion that could be used to encourage rural women’s participation. Based on twenty-eight focus group sessions in rural and sub–urban regions, Fukuoka prefecture. We chose 294 women who are sharing per capital and are working in groups as a random sample from these focus groups to collect our data.

Findings indicated that Japanese socioeconomic system is an excellent example of standard and successful pioneer experience in promoting small industries depending on ladies as the main power of running workshops and manufactories in rural area.

Our findings indicated high level of woman’s socioeconomic participation. Three nil proposed hypotheses were confirmed by correlation coefficients where significant correlation relationships were found between level of socioeconomic participation and each of woman’s age, farm size and household income. When the eight variables were subjected to multiple regression analysis the same previous three hypotheses were confirmed. The eight independent variables, taken together, explained 73.54% of the variance in women’s level of socioeconomic participation. The study was concluded a discussion of focus group sessions and specific strategy required to help policy maker in promoting small industries in rural area.

INTRODUCTION

The Japanese socioeconomic system, thus far pursuing material wealth under rapid economic growth, is now at an important turning point as the new century was starting a few months ago. Japan’s seasonally adjusted unemployment rate stood at 4.8 percent rate in April 2000, drown 0.1 percentage point from the post–war record high of 4.9 percent registered in February and March, the Management and Coordination Agency said Tuesday. The first improvement in jobless rate in seven years was due partly to the decline in the number of the university graduates failing to find jobs. The number of university graduates unable to find work fell from 230,000 in March to 240,000 in April. The total income of business farm households *(22% of all commercial farm households)

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was 8.17 million yen in 1998 (up 2.8% from the previous year). This represents 87% of semi–business farm households and 96% of side business farm households. (*Households engaged in farming for more than 60 days in a year).

In 1999 (rough estimates, commercial farm households), agriculture gross income declined 4.0% from the previous year, agricultural income down 9.4%, and nonagricultural income down 3.5%, resulting in a 3.3% decline in the total farm income. When compared with the average income per household member, commercial farm households earned more than non-farming households did while that of business farm households was less. In terms of per capita daily income, the average agricultural income of commercial farm households accounted for a little over 30% of the average wage of those engaged in manufacturing while that of business farm households represented around 50%.

In Japan with increasing public awareness of limited resources, environmental problems and possible food crises, the government has begun to reassess the values and lifestyles to develop new values and a more civilized way of life that put a greater emphasis on harmony, coexistence, health, and comfortable and peaceful living. Japanese government accordingly has issued a new low to facilitate social development (Annual Report on Food Agriculture and rural areas in Japan Feb. 1999). The previous report has also shown that the food industry and agricultural products have been closely related through the supply and demands of a contentious flow of these products for related–industrial projects. In recent years, however, food imports for the food industry have been sharply increasing. Agriculture should thus be improved in the production and supply system to meet the food industrial needs. Such a close relationship is mutually beneficial. In another words; stable flow of high quality raw food materials for food industry and increased demand for domestic agricultural products for the same purposes should be taken in consideration in planning the national agricultural and industrial development plans by providing more supporting services to maintain this relationship. An example of that is by improving and promoting structural uniforms through designated representatives who can provide the appropriate advises and training in different activities. Improving the information and management system and making it easily accessible to both personal in agriculture and its related industries is also of great importance in the developmental process.

Encouraging electronic commerce by making full use of advanced technological tools like the inter–net and establishing a well arranged and optimal system of distributors to consumers is also among the government ambitious program.

Reducing environmental damage through waste products should also be put in account by securing a stable and economic way of recycling agricultural as well as industrial waste products.

Local governments and also national offices should together cooperate in this socio–economic system for a better use of resources with proper role sharing.

MATERIALS

Age and Sex Distribution in Agriculture and Related Industries in Japanese Rural areas
According to the same previous report, the number of full-time aged farmers has continuously increased. Population of those mainly engaged in farming was 3845000 (including both sexes in work), down 1.2% from the previous year, but that of those aged 65 years old and over showed a 2.1% increase.

As a result, the ratio of aged workers of 65 years and over accounted 51.3% more than half of the total farming population. Nevertheless, Japanese women have become involved in regional decision-making process. Recently Japanese women have started to be active in the field of processing agricultural products, the number of cases was 4040 in 1997, and jumped to be 6039 in 1999. They remain inactive in spite of the remarkable increase in their number as agricultural committee members. Also, Japanese women have become more actively involved in business start-ups, greatly contributing to the revitalization of rural areas. Given this fact, more women-friendly environments should be created. The share of Japanese women who are actively engaged in agriculture and its related industries has exceeded 60%, they also do their house work, caring of their children and old people.

Small and occupational manufactories usually rely on or depend on local raw materials, so, it plays an important role in local development of many countries as it has in Japan and its currently having a very strong influence on the Asian economies. Moreover, it can also be established at any place leading to more geographical distribution. This leads to a wide spread of the market of these projects leading to a decrease in the marketing expenses plus being near from the source of raw materials and man powers.

In a report by the Japanese association of agriculture (JA) in April 1999, it was clarified that women's own consciousness and concepts are still old-fashioned and they considered no role for themselves in promoting agriculture and its related activities. Therefore JA has considered that women's participation as one of its goal and it is also trying to promote it. The working force in business farm households and factories, in rural areas of Japanese business activity, are mainly composed of women leading to the fact of declining the working force expenses in comparison to the total product, this enable the Japanese to increase the budget of investment in highly advanced and sophisticated technology without any increase in the final product price.

To clarify the problem, researches on women's managers may make it easy to understand the difficulties for them to start business, doing the operation in a simple way and also marketing and other activities. Investigation of the Japanese experience in promoting rural areas small industrial projects as a successful and a pioneer experience of a developed country, may be reflect highlight the negative aspects of the Egyptian experience to find corrective tools as well as guiding Egyptian policy makers to adopt the appropriate strategies and means to raise the women active socio-economic participation in the national developmental plan and also to adopt the small rural industrial projects as method of raising up the general socio-economic status.

Hypotheses
Based on the previous theoretical orientation and literature review, the following Hypotheses are poised be empirical tested in this study:
1- Women's age, is related positively to women's level of socioeconomic participation (LSP) in promoting small industries.
2- Women's level of education is related positively to women's LSP.
3- JA training and seminar programs, is related positively to women's LSP.
4- Woman's farm size is related positively to women's LSP.
5- Household income is related positively to women's LSP.
6- Manufactory's benefit value is related positively to women's LSP.
7- Manufactory's labor force participation is related positively to women's LSP.
8- Woman's level of processing knowledges is related positively to women's LSP.

**Current Study Objectives**

Our study aims to:
1- Investigate the role of women in promoting industrial projects in rural and sub-urban areas.
2- Identify the main problems that are facing women activities and hindering the promotion of rural areas small industries.
3- Determinate the social, personal and economical variables affecting the level of woman's socioeconomic participation.
4- Introduce suggestions that could be used for promoting the effectiveness of these small industries.

**Theoretical framework and literature review**

It has been agreed that participation in socio– economical development is seldom being uniformly distributed throughout the population.

Some people maybe relatively inactive and they may rarely participate in the development process; others may considerably be more active. Moreover, some may concentrate their participation in one or few activities; while others may divide their participation among numerous issues and activities. (Edwards & Booth 1973, El– Ezaby 1989, El– Ezaby & El– Helbaway 1999)

Many researches concerning the socio–economic development strategies for rural communities have shown controversies as regard women's contribution to the total farm household economy. Some scholars have shown the prevalence of “Domestic–Ideology” in which men are farmers (Jellison 1993, Rosenfeld 1985, Sachs 1983, 1985) while women play a supporting role of “nurture, mother, wife, helpmate, and homemaker” (Ross 1985). On the other hand, other studies argue that this domestic ideology neglects or devalues women's contribution to the total farm household economy, turning women into invisible farmers (Hill 1981, Sachs 1983). Although women have made significant contribution to agricultural production through the 20th century, policy makers, extension personnel, and social scientists have undervalued farm women's labor and treated it as irrelevant to agricultural production. (Friedland 1991, Hill, 1981, Rosenfeld, 1985, Sachs 1983)

Jellison (1993) stated that the progressive–era cooperative extension services encouraged farm women to embrace Labor–saving home technologies so that they might devote more time for being home–makers and consumers, without acknowledging that much of farm women's time was spent doing production–related chores. Similarly, Ross (1985) pointed out that the census of agriculture and other statistical series only partially account for women's work on farms.

For two decades from the 1940s through the 1960s, scholars typically dealt with farm
women's contributions to farm production in a very limited, stereotyped manner. Rural sociologist Paul Landis (1948) wrote that recognizing her inferiority in terms of farm work, which calls for heavy physical exertion, the women readily accepts the man as the head of the family. Later, functionalist accounts of farm life characteristically separated males and females role spheres. (Colman & Albert 1984, Ross 1985, Sachs 1985)

Straus (1960) suggested that the more successful farm families are characterized by role specialization, with husbands making major financial decisions and wives taking care of the home and children. Additionally, social scientists of the period labeled farm women's traditional agricultural production jobs as non-productive and domestic. They rarely a knowledge farm women's contribution to the farm household as a single productive unit. (Passinger & Schwarzweller 1984, Friedland 1991, Sachs 1993).

With post–World war II agricultural industrialization, farm–women saw many of their traditional farming tasks, such as egg and poultry production disappearing. (Adams 1993, Fink 1986)

Nevertheless, women still perform important roles directly and indirectly related to agricultural production (Fink 1987, Jellison 1993). While specific tasks vary according to farm size and community mix (Fried 1991, Sachs 1985).

Farm–women commonly tend livestock, drive tractors, keep farm books, monitor community market information, and run farm errands. They also continue to furnish farm labor during time of peak demand and chronic shortage, bring in cash via off-farm employment or their own business enterprises, and prepare food for farm workers and family use. (Friedland 1991, Gladwin 1985, Rosenfeld 1985, Sachs 1983, 1985) These contributions became particularly important during American farm crises of the 1980s, when many American women took off-farm jobs or increased their farm work to make up for the loss of labor arising when a spouse took an off-farm job. (Barlett 1986, Bokemeir & Tickamyer 1985, Friedland 1991, Rosenfeld 1985)

In the eighties and nineties decades of the 20th century, social scientists and historians produced a substantial body of researches demonstrating that farm women have been the key participants in agricultural production and that they have made essential contributions to family farm's economy. (Passinger & Schwarzweller 1984, Reimer 1986, Sachs 1983, 1985)

Walter & Wilson (1996) showed that farm–women not only have kept books, produced eggs and poultry, and grown food farm households, but have worked directly in the fields as farm labor. Furthermore, women's contributions to agricultural production often have been one of the keys to a farm's economical survival. On many farms, women's egg and poultry enterprises generated cash to cover day-to-day farm expenses, and women have typically been a ready source of unpaid labor during seasonal peaks in labor demand and periods of agricultural labor scarcity.

Laseley and Fellows (1990) reported that in their 1989 survey of Midwestern farm spouses nearly one quarter had increased the time they spent maintaining farm books or working at an off-farm jobs, while smaller numbers reported spending more time running farm errands, caring for animals, or doing field work.

Despite farm women's diverse contributions to agricultural production, a sexual division of labor still operates on most farms. While farm women may perform men's work–tasks directly related to farm commodity production–farm men rarely perform
women's work in the farm. (Rosenfeld 1985, Sachs 1983)

When farm women are directly involved in commodity production activities, they are more likely to be labor-intensive tasks rather than capital-intensive ones. In the few cases when women take primary responsibility for a commodity production task (e.g., raising poultry), the task is often redefined as housework (Garkovich & Bokemeir 1988)

Elements of domestic ideology are still present in the value as signed to farm women's work (Flora & Johnson 1978, Osterud 1993). Men supervise women's labor and make the majority of decisions about the use of land, crop, and machinery. (Colman & Albert 1984, Lastly & Fellows 1990, Rosenfeld 1985, Sachs 1983) And though women themselves value their contribution to farm production, they tend to characterize it as helping—out and to view field work and other men's work as necessary, but generally in appropriate for women to do except in times of need (Jellison 1993)

Distribution of small limited industries in rural areas

Social studies have proven that because of rural areas low socio-economic standards compared to those in urban societies, the small and limited industries have grown to become widely distributed in rural areas. (Rains & Stewart 1987) The importance of these projects are in its role of absorbing the work force, consequently in solving jobless problems and increasing the income. Moreover, some experts have recommended that small rural industrial projects should be encouraged as an effective tool in rising up life-standards in rural areas as they play a very important role in employment and manufacturing. (UN report 1988) Another study did highlight the fact that small industrial projects are developed and influenced by the agricultural policies, necessary social and infra structural services. (Havnevir & Wangwa 1985)

In developing countries, small industrial projects represent only 10% out of the total industries. Yet, in the developed countries they represent about 45–60% out of the total industrial activities. (Kirby & liedholm 1986) The same authors also stated small projects play an important role in the national income and the socio-economic progress of developed countries.

METHODS

Data for this study are drawn from focus groups and social survey with random sample from rural women who are share per capital and working together in groups, each group had housing workshop or manufactory, located in rural and sub-urban areas of Fukuoka prefecture, Japan. The major industry has been food industry and its major raw material has been round farm products. We conducted twenty-eight focus group sessions among rural women by the helping of JA cooperative officials in Fukuoka. The focus group sessions were conducted to help identify hypotheses, to build the survey instrument (Questionnaire sheet) to be used, and to identify the role of rural women in promoting small industries. we are lied heavily on Krueger 1994 suggestions for conducting focus groups. each session lasted approximately 90 minutes. In addition to the focus group we conducted mail survey to rural women, who were chosen from each group by helping of JA local cooperative development agents. We mailed the Questionnaire sheet to random sample from 294 women located in rural and sub-urban
areas of Fukuoka areas.

Descriptive statistics for all variables are as follow:

- The dependent variable of the study is women's level of socioeconomic participation, was measured by woman's share per capital which included fixed and running investment.
- Other interdependent variables were also measured as follow:
  - Woman's age as years.
  - Level of education measured by years of formal education.
  - JA training and seminar programs: number of training and seminar she has attended.
  - Woman's own land size by hectare.
  - Household income was measured by thousand yen monthly income.
  - Manufactory's benefit value was measured by selling value minus cost value.
  - Manufactory's labor force was measured by number of women who were sharing per capital and working in manufactory.
  - Manufactory's level of industry processing knowledge was measured by thirteen items, the respondent was asked to assess each item by indicating agreement or disagreement on an intensity scale, the responses to the various items were scored in such a way that a response indicative is the most favorable attitude was assigned the highest score (3 points), while the response representing the least favorable attitude was given the lowest score (1 point) and neutral (2 points).

The descriptive statistics for the dependent and independent variables are presented in Table 1. We conducted a reliability check on this scale and each had a Cronbach's Alpha (of at least = 0.7). To ease the interpretation of this scale we recorded the variables so that the higher the score, the more support there was for the role of rural woman and socioeconomic activities. Both correlation and regression analysis techniques were utilized in analyzing the empirical data. Parsons product moment correlation coefficients were used to indicate the magnitude and direction of the associations or covariance between the dependent variable and each independent variable. Our regression analysis examine the effect of woman's level of socioeconomic participation in promoting small industries and additional interdependent variables, our analytical strategy is to examine the impact of each independent variable on the dependent variable while controlling for variation in other independent variables.

The fitted equation used in this study is as follow:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Variance</th>
<th>Std. dev.</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socioeconomic participation</td>
<td>37.29</td>
<td>471.4</td>
<td>21.32</td>
<td>10</td>
<td>80</td>
<td>70</td>
</tr>
<tr>
<td>Woman's age</td>
<td>56.43</td>
<td>69.44</td>
<td>8.18</td>
<td>43</td>
<td>70</td>
<td>27</td>
</tr>
<tr>
<td>Level of education</td>
<td>11.54</td>
<td>11.29</td>
<td>3.30</td>
<td>6</td>
<td>20</td>
<td>14</td>
</tr>
<tr>
<td>JA training and seminar</td>
<td>2.21</td>
<td>0.62</td>
<td>0.77</td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Farm land size</td>
<td>2.86</td>
<td>2.08</td>
<td>1.42</td>
<td>0.6</td>
<td>6.3</td>
<td>5.7</td>
</tr>
<tr>
<td>Household income</td>
<td>182.68</td>
<td>10580.52</td>
<td>101.01</td>
<td>65</td>
<td>430</td>
<td>365</td>
</tr>
<tr>
<td>Manufactory’s benefit value</td>
<td>1865.00</td>
<td>723700</td>
<td>835.38</td>
<td>430</td>
<td>3960</td>
<td>3470</td>
</tr>
<tr>
<td>Manufactory’s labor force</td>
<td>14.07</td>
<td>64.96</td>
<td>7.91</td>
<td>4</td>
<td>33</td>
<td>29</td>
</tr>
<tr>
<td>Level of knowledge</td>
<td>27.64</td>
<td>42.83</td>
<td>6.43</td>
<td>13</td>
<td>36</td>
<td>23</td>
</tr>
</tbody>
</table>
\[ y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 \]

Where

is the predicted value of women's level of socioeconomic participation.

\( X_1 \) is woman's age, \( X_2 \) is woman's level of education, \( X_3 \) is JA training and seminar programs, \( X_4 \) is woman's farm size, \( X_5 \) is household income, \( X_6 \) is manufactory's benefit value, \( X_7 \) is manufactory's labor force and \( X_8 \) is manufactory's level of industry processing knowledge.

The coefficient of determination \( R^2 \), is utilized to indicate the proportion of variance in the dependent variable explained by the independent variables.

**RESULTS**

**Focus group session findings**

We conducted twenty-eight focus group sessions with rural and sub-urban women, who were membership in JA cooperative located in Fukuoka prefecture. Among these groups, twelve focus group sessions with rural women who were working together and sharing per capital in group within workshop (Type 1) and other sixteen sessions with rural women who were own food manufactory (Type 2). Descriptive for all focus group presented in table2.

Type 1, showed that women as in a system of structural competently particular industrialization problems with practices, they cooperative in groups, ingenuity and skill are the requisites of workshop success. In our discussion, “I was learning how to make Ohagi from special sweet, but I though in making it without higher cost so I read and search about information until I innovated original way”, a woman said. Another woman said “I can earn 100,000~150,000 yen monthly, but I am so busy and couldn’t sleep”. In a session discussion a woman said “Japanese women in rural area play an important role in promoting small industries and improving their household income by using farm products as raw material and added value processed it to become a suitable food, moreover they can marketing it.” Another woman said “rural women can developed commodity for the diversity of consumers needs.”

Type 2, showed that women played more significant role as a major character’s successful in rural life and industrialization. They reported that generating an income could be more from women’s hobby. In dairy production and food processing, women have advantages because of their maternal instinct and intuition. “Rural women seeking

<table>
<thead>
<tr>
<th>Variable</th>
<th>Rural women in focus group sessions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Workshop</td>
</tr>
<tr>
<td>Woman’s age</td>
<td>47</td>
</tr>
<tr>
<td>Effective productive days</td>
<td>110</td>
</tr>
<tr>
<td>Work’s hour wage (¥)</td>
<td>350</td>
</tr>
<tr>
<td>Level of education (year)</td>
<td>6</td>
</tr>
<tr>
<td>Household income (1000 ¥)</td>
<td>163</td>
</tr>
<tr>
<td>Project’s labor force (Women)</td>
<td>4</td>
</tr>
</tbody>
</table>
Table 3. Descriptive for problems hindering the promotion of rural industries

<table>
<thead>
<tr>
<th>Problem facing women's activities</th>
<th>% of total women number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lake of financing to fund running cost</td>
<td>25.00</td>
</tr>
<tr>
<td>Lake of clients or how to sell</td>
<td>19.05</td>
</tr>
<tr>
<td>Increasing burden of taxes</td>
<td>15.48</td>
</tr>
<tr>
<td>Lack of social communication</td>
<td>14.29</td>
</tr>
<tr>
<td>Lake of industrial knowledge</td>
<td>10.71</td>
</tr>
<tr>
<td>Increasing prices of raw materials</td>
<td>8.33</td>
</tr>
<tr>
<td>Others</td>
<td>7.14</td>
</tr>
</tbody>
</table>

for how have balanced production and reproduction tasks in the company”, a woman said.

Concerning problems which facing women in their activities and hindering the promotion of small industries in rural and sub–urban communities, type 1 admitted that employment and population growth were important to improve industrialization, but they stressed the limits of growth and questioned whether the cost exceeded the benefits of growth. “Local leaders and rural women didn’t interact much, but as individuals they had some long–standing relationship with other. Focus group divided problems as: lack of financing to fund running cost, Lack of clients or How to sell, increasing burden of taxes, lack of interaction with official agents and some of elderly had conservative idea while others were selfish. However, type 2 admitted that increasing prices of raw materials, weak influence from opinion leaders and change agents, setting rewards and roles of organization and increasing burden of taxes. Table3 describe the main problems facing women’s socioeconomic activities.

Concerning women’s proposal for solving the mentioned problems, they reported that, manufactories and workshops should be supported by JA cooperative by making seminars and training programs for them to be able to play their role in developing area, improving information about food industry by developed communication methods in rural area, advancement of industrial techniques, encouragement of industrialization–related investment by food industry and establishing a specialized authority to be entrusted with coordination between the official agencies, that offer scientific technical, financial, and marketing services, and rural women who cooperative in promoting small industries.

Social survey findings

Relationships between level of socioeconomic participation and other variables are shown in table 4. The results of the correlation analysis indicated significant correlations between level of rural women's socioeconomic participation and each of the women's age, women’s farm size and household income. No significant correlation’s were found between level of rural women’s socioeconomic participation and each of women’s level of education, JA training and seminar programs, manufactories benefit value, labor force participation and women’s level of processing and industrial knowledge’s.

When the variables were subjected to multiple regression analysis, it was found that, the same variables which has significant correlation’s had significant effects on women's socioeconomic participation. The eight independent variables, taken collectively, explained 73.54% of the variance in the level of socioeconomic participation as indicated
Table 4. Correlation coefficient between variable of the study

<table>
<thead>
<tr>
<th>Variable</th>
<th>Y</th>
<th>X1</th>
<th>X2</th>
<th>X3</th>
<th>X4</th>
<th>X5</th>
<th>X6</th>
<th>X7</th>
<th>X8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woman's age (X1)</td>
<td>-0.61**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level of education (X2)</td>
<td>-0.08</td>
<td>0.22</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JA training and seminar (X3)</td>
<td>0.26</td>
<td>0.03</td>
<td>0.14</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farm land size (X4)</td>
<td>0.57**</td>
<td>-0.18</td>
<td>0.01</td>
<td>0.76**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household income (X5)</td>
<td>0.61**</td>
<td>-0.30</td>
<td>-0.02</td>
<td>0.01</td>
<td>0.09</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufactory's benefit value (X6)</td>
<td>-0.03</td>
<td>0.03</td>
<td>0.37</td>
<td>0.03</td>
<td>-0.05</td>
<td>0.36</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufactory's labor force (X7)</td>
<td>-0.16</td>
<td>-0.05</td>
<td>0.06</td>
<td>-0.13</td>
<td>-0.27</td>
<td>-0.14</td>
<td>0.19</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Level of knowledge (X8)</td>
<td>0.14</td>
<td>0.14</td>
<td>0.08</td>
<td>0.45*</td>
<td>0.34</td>
<td>0.18</td>
<td>0.25</td>
<td>-0.05</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: * Statistically significant (P<0.05). ** Statistically significant (P<0.01).

Table 5. Regression coefficient, T values and R² value for the effect of the independent

<table>
<thead>
<tr>
<th>Variable</th>
<th>b</th>
<th>β</th>
<th>T</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woman's age</td>
<td>-0.92**</td>
<td>-0.35**</td>
<td>3.10</td>
<td>9.06</td>
</tr>
<tr>
<td>Level of education</td>
<td>0.62</td>
<td>0.10</td>
<td>0.86</td>
<td>0.74</td>
</tr>
<tr>
<td>JA training and seminar</td>
<td>-5.75</td>
<td>-0.21</td>
<td>1.24</td>
<td>1.55</td>
</tr>
<tr>
<td>Farm land size</td>
<td>8.27**</td>
<td>0.62**</td>
<td>3.67</td>
<td>19.47</td>
</tr>
<tr>
<td>Household income</td>
<td>0.11**</td>
<td>0.53**</td>
<td>4.43</td>
<td>19.60</td>
</tr>
<tr>
<td>Manufactory’s benefit value</td>
<td>-0.04</td>
<td>-0.20</td>
<td>1.59</td>
<td>2.51</td>
</tr>
<tr>
<td>Manufactory’s labor force</td>
<td>0.22</td>
<td>0.08</td>
<td>0.67</td>
<td>0.51</td>
</tr>
<tr>
<td>Level of knowledge</td>
<td>0.08</td>
<td>0.02</td>
<td>0.20</td>
<td>0.04</td>
</tr>
</tbody>
</table>

Note

Constant = 52.36*
Variable on women's socioeconomic participation.
R²=0.7354 D. W. =2.0794 F=10.3779**
* Statistically significant (P<0.05).
** Statistically significant (P<0.01).
b is partial regression coefficient. β is standard partial regression coefficient.

by the standardized coefficient of determination (R²). As shown in table 5, the most important variables were household income, farm size and women’s age respectively as indicated by T values.

DISCUSSION

On the light of the study findings a number of observations, explanations, implication and conclusions can be presented as follow:
- Rural women can play an important role in promoting small industries and increasing local income by using farm products as raw materials and added values to become processed food and developed commodity for the diversity of consumers needs. Moreover, they wanted higher participation with opinion leaders and change agents.
- Focus group sessions reflected certain changes in women activities as agricultural producer on the general forms and in the off-farm labor force. Also, they had much
different set of experiences, active in using modern technical method, management strategy or as successful innovators and trends towards promoting their manufactories and workshop.

- The main problems facing women's activities and hindering the promotion of small industries are lacking of financing to fund running cost (25%), lack of clients (19%), increasing burden of taxes (15%), lack of interaction (14%), lack of knowledge (11%) and increasing prices of raw materials (8%).

- The relative importance of women's age, farm size and household income as determinants of rural women's socioeconomic participation evident in this study, we argue that the integration of women role for increasing their effective participation in socioeconomic issues as well as in other community oriented action.

- Study findings indicated that eight independent variables included in the regression model, taken together, explained about three-fourth of the variance of the rural women's socioeconomic participation. The relatively high percentage of the explained variance may due to contain important variables in the regression model. The inclusion of such variables in the future studies may enhance our understanding of the phenomenon of rural women's socioeconomic participation.

- The study indicated a specific role for Japanese woman in socioeconomic participation. On the light of this study we argue a specific strategy to help Egyptian policy makers responsible for developing small industries in rural areas. This strategy can be summarized as the follows:

  - Amendment the banks law in order to realize justice in providing banking services and reconsidering the rules regulating guarantees of loans.
  - Setting up a financial institution specialized in offering loans to women's projects beside developing the role of the banking credit risk guarantees company, and establishing a specialized bank financing women's workshop and manufactory.
  - Regulating women's activities to be a legal and institutional framework and introducing their products into the market in terms of tax and customs exemptions and other related advantages.
  - Establishing a specialized authority, tie, to be entrusted with coordination between rural women and the official agencies that offer scientific, technical, financial and marketing services.
  - Further studies still to be done in order to explain the factors, especially economic factors, affecting on small industry projects, economic policies and infrastructure.

Supporting small industry in rural area so as to play its role in developing rural communities will be needed rural women as significant contributors to the economic will being and improving adequate living conditions for rural residents.

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