Assessment of Current Status of Women Farmers in Japan Using
Empowerment Indicators

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Abstract: This research assessed the current status of Japanese women farmers using universal measurement
of women empowerment. Two prefectures, Hiroshima and Shimane were selected. Stratified sampling technique
was used to select respondents from each village while structured questionnaire was employed to collect data
on economic, social, familial, legal, mobility and political status of the respondents. The result shows that status
of women farmers was improved in the recent time compared to years back. This was revealed in the favourable
responses to some statement questions such as; freedom and participation in voting, relationship with
husband, participation in outside work and freedom of movement. However, their status as unpaid workers on
family farms, lack of freedom to borrow and lend, inability to express their mind over the children to mother-in-
law were the prevailing items of their disempowerment. Classifying respondents on the overall empowerment
shows that majority of them were highly empowered. Inferential analysis using t-test to compare women farmers
past and present status shows a significant difference, $t = 4.827$, $p = 0.000$. Relationship between personal
characteristics of women farmers and their present empowerment status using Pearson Product Moment
Correlation (PPMC) coefficient $r$ shows negative correlation between age and all empowerment indicators. Also
marital status has negative correlation with familial and legal empowerment while mother-in-law and familial
empowerment were positively correlated. It therefore suggests that status of women farmer in Japan has
improved, compare to their situation years back.

Key words: Empowerment, improved status, indicators, items, women farmers, Japan

INTRODUCTION

Japanese rural women like women in other countries of the world play an important role in sustaining
agriculture, forestry and fisheries. In addition, they contribute to the management of life (taken care of
mother and father in-law) in rural areas, maintenance and vitalization of the local community (ITWE, 2003).

Rural women in Japan have been involving in agriculture since human inception and their involvement in
agriculture up to date has been out-numbered that of men (ITWE, 2003; MOFA, 2002; Nakamichi, 2000;
Otomo, 2000).

Meanwhile, before economic boom (late 50s - early 70s), Japanese women farmers engagement in agriculture
as in many other countries of the world generally was that of subordinate role or farmers wife. However they
began to play a prominent role in agriculture during economic boom by taken care of the farm left by their

spouse. At that time burden of agricultural works was on women couple with their role as wife and
dughter in-law. Despite their roles and part-time engagement of their spouse on farm activities, men
were still in charge of management and marketing activities of the farm products. Women lack production
resources due to ie system (typical patriarchy), they lack money to use at their will due to unpaid labour of
their services, they lack control over their activities, less chance to decide matters independently due to
constraint from in-laws particularly from mother-in-law. In addition, they have less access to bases of social
and decision making power both in the household and farm level (personal interview 2006), they rarely becomes
farm manager (Ichida, 2000). Hence, rural women in Japan were disempowered in the past. However,
Friedmann (1995) linked women disempowerment to traditional pattern of social relation (such as ie system in
Japan) in the society which constrained women entitled

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claiming, _ie_ system expressed the way gender exists in the rural society of Japan. It is a unit of family registration by which in principle a first male child inherits family estate (Otomo, 2000; Takahashi, 2000). This is permitted as an exception to limit the inheritance of assets to the farm successor in many farm households.

Meanwhile, from the _ie_ point of view, female is an auxiliary of male child and this could be regarded as the origin of women problem particularly rural women in Japan. The system also believes that master of the household is _ie_ and is the farm manager, hence the role must be assumed by man not woman. In the village up till present, _ie_ still constitute an important unit of society and rural people hold the ideology very strong. Nevertheless, women farmers’ roles in rural areas call for the improvement of their status in order to harness their full potential. Also, the social process with which empowerment occurs in relationship to others makes it important (Nanette and Chery, 1999) as it serves as mechanism by which people gain mastery of their affairs. Also it will lead to the expansion in people's ability to make strategic life choices, in a context where this ability was previously denied to them (Kabeer, 2001).

Aside economic development with consequent change in standard of living of Japanese generally, rural women have began to participate in different activities to liberate themselves. Involvement in those activities might have improve their status was the assumption underlined the study. Meanwhile, it is clear from the literature on gender and empowerment, that the role of gender in development cannot be understood without understanding the socio-cultural (as well as political and economic) contexts in which development takes place (Savitrim and Elson, 1999; Martha, 2000). Therefore, the study assessed the status of women farmers/processors in Japan using empowerment indicators.

Specifically, the study investigates rural women involvement in agricultural activities. Also, it assesses the economic, social, familial, legal, mobility and political status of women farmers. Lastly, it explores relationship between women farmers current status and some demographic characteristics. It was hypothesized that demographic characteristics of respondents have no relationship with their empowerment in all indicators. The papers contribution to the body of knowledge lies on the fact that, a lot of policy programs has been introduced to improve women status generally and rural women in particular, by the government such as National Machinery for the Advancement of Women, National Pension Law etc to incorporate women farmers in to pension scheme.

Yet, women farmers status in many activities was reported to be unsatisfactory (MOFA, 2002). Global survey on women empowerment conducted by UNDP (2004) and Lopez-Claro and Zahidi (2004) also ranked Japan low closed to Bangladesh and even below South Africa. Improving women status though is a slow process which could take long time to achieve. The essence of this research however, is the needs for constant review of women farmers status in order to create awareness and a sense of self-evaluation as well as opportunity for the re-examination of the family and gender relationship using indicators of women empowerment.

**MATERIALS AND METHODS**

The survey was conducted in Shimane and Hiroshima prefecture in Chugoku region of Japan in spring 2006. The area is mountainous in nature thus it is being regarded as one of the less favoured area in Japan. Many villages in the area were concentrated on the mountain with steep small farmland for vegetables along with paddy production. Women farmers in these areas are actively involved in agriculture and agricultural related activities.

Populations of the study were the women farmers and processors in the study area. Stratified random sampling technique was used to select respondents based on the type of market which they used to dispose-off their products. First, grass root market was identified (i.e., direct farmers market. Private, Municipal, JA etc.) where they sell their products. In each of the market, there are different women groups (processors, vegetable farmers and hand made products group). Random sampling was used to select the respondents from each group. Total sample size was 130 respondents. Structured questionnaire and interview schedule were used to collect data from respondents with statement questions on empowerment based on universal indicators of empowerment by Malhoatra _et al._ (2002).

The idea behind the model is that empowerment of women occur along the dimensions: such as economic, socio-cultural, familial/interpersonal, legal, mobility and political. Within each dimension are sub-domains with level of social aggregation such as household, community, regional, national and global levels as its operational definition.

At the household and community level which were the focus of the study, sub domains of each dimension of women farmers empowerment was considered as having production resources, access and control of income, social relationship such as being member of a society,
attending meetings and events, participating in domestic decision making, relationship with mother in-law, awareness of legal right, freedom of movement and possession of means of transportation, awareness and participation in political activities.

Women farmers status was measured through a 3-point likert scale of agree, neutral and disagree with 3, 2 and 1 scores respectively for the positive statement questions and reverse order for the negative statement question. (Using husband’s land, having personal saving, participation in group/community meeting/events, acquisition of knowledge through mother in-law. Possession of personal car, participation in protest etc.) Respondents score was computed across statements then categorized on indicator basis as well as grouping the overall responses using both descriptive and inferential statistics.

RESULTS

Profile and farming activities: First on the profile of respondents was the age with average being 60.7 years while minimum and maximum was 35 and 84 years, respectively. Meanwhile, ages 35-60 years constitute 50.7%. However, Japanese old-age starts from over 65 years, thus age 35-65 years constitute 63.8%. Only 15% was in age 35-50 years. Marital status suggests that close to 90% were married, no single women farmer among the respondents and the percentage of divorcee and separated were low. Marital status depicts rural women’s endurance (Takahashi, 2000) and the reported low rate of divorce in Japan compared to America and Europe. Women farmers household members ranged from 1-9 with almost equal percentage of household of 1-3 (45.3%) and 4-6 members (42.3%). Large member of household with as much as nine members might imply that they were leaving with extended family members such as mother or father in-law in confirmation of typical rural Japan.

The major determinant factor in agricultural production is land, hence the classification of respondents according to land size cultivated to different enterprises.

The result shows that women farmers were small-scale farmers with about 42% of women cultivating less than 1 ha of land to paddy crop and 64.6% cultivates same to vegetables. In addition, women without land for any enterprise constitute 46.9% and few possessed other land which was being cultivated to other products. Meanwhile, findings from the comparison of involvement of women farmers and their household in agricultural activities; revealed both women farmers and their households involvement in paddy production decreased currently but while household’s involvement in vegetable production and processing also decreased, women farmers involvement in those activities increased. Other activities involved by women farmers and their household include fruit, flower, tobacco leaf, egg, other livestock production and pickled vegetables (Ishikemono).

More involvement of women farmers in some activities than their household suggests that majority of people that engaged in agriculture were women confirming previous report by Otomo (2000), TIWE (2003), MOFA (2002) and Nakamichi (2000). Engagement of women farmer in agriculture however divided into three; full-time, part-time and hobby; with full-time and hobby participation being polarized at present while part-time decreased. Furthermore, women farmers’ source of information varied widely with agricultural cooperative topping (20.9%) the list of their information source. Immediate environment such as husbands and relatives (16.5%) also play significant role in providing information to women farmers. Other sources of their information were agricultural extension (18.9%), women association, direct farmers market, media, study group and defunct agricultural machinery company. While information from these other sources increases, the result revealed agricultural cooperatives to be decreasing because majority of the respondents were not a regular member. This was confirmed by their membership in the society in which full-member constitute 28.5%, sub member 16.9% and non-member 42.3%, hence the tendency of feeling not-belonging and look for alternative source. The factor stated by respondents to be affecting their farming activities were old-age, traditional ie system expressed as lack of succession, lack of sale, competition, lack of profit and toughness of the work.

Status of women farmer: This was considered based on the universal indicators of empowerment developed by Malhotra et al. (2002). The idea behind the model is that empowerment of women occur along the following dimensions: economic, socio-cultural, familial/interpersonal, legal and political. Within each dimension, there are sub-domains and in order to operationalize these dimensions, various levels of social aggregation must be considered such as household, community, regional, national and global levels. At the household and community level which were the focus of the study, sub domains of each dimension were discussed under each indicator below.

Economic Empowerment (EE): Eight statement questions were used to measure the economic empowerment of women farmers; ranging from assets possession such as land, machine, having saving, control over spending,
being in-charge of management of the farm, having price and place decision ability for their products etc. Present score revealed respondents to be more empowered (61.4%) than the past (54.2%) but ranking the items used in all indicators shows none of economic items among the first top ten of women farmers empowerment while three of its items were among the most items with women farmers disempowerment.

**Social Empowerment (SE):** Social empowerment indicator measures the ability of respondents to interact effectively in the public sphere and participation in non-family groups (Schuler et al., 1998). The social empowerment of women farmers was considered as being a member of the group, participation in the group event/activities, awareness and participation in community events/ programs, attending friends celebration and making decision on gift presentation. The score obtained (60.6%) in this indicator was closed to economic empowerment score but less than past score (63.5%) in the same indicator, which means decline in the present status compared to the past. The decline in the respondents present social status notwithstanding, three of its items were among the top ten areas of women farmers empowerment while none was among their disempowerment.

**Familial Empowerment (FE):** Familial empowerment usually examines the conjugal relationships and sometimes women relationship with other members of the household. It also relates to status and decision making power within the household, sharing of roles, lack of devaluation of women, emotional autonomy etc (Jejeebhoy, 1995; Schuler et al., 1998; Kishor, 2000).

In rural areas, empowerment of women in familial dimension is usually rare due to preservation of norms, tradition and culture. Also because women are usually prevented by their spouses, from programs or activities that can make them challenge the status quo of gender power (Schuler et al., 1998). In this study, items used covered all the theoretical concepts mentioned above. The finding suggests that despite the sensitivity of this indicator especially in the rural areas, women farmers were more empowered in the past but less empowered presently (64.2.0%) with the difference of 0.8%. Cordial relationship and freedom of expression with their husband were among the top list of their empowerment while relationship with their mother in-law and inability to divorce should they not interested any longer were their prevailing disempowerment items in this indicator. However, inability to divorce is not limited to rural women alone but cut across the whole Japan due to its associated problem (Kenyon, 2006).

Impact of mother in-laws was considered under the familial empowerment because in rural society of Japan, conflicts between mother-in-law Shutome and daughter-in-law (Yome) were said to be a common problem due to poor evaluation of (Yome) by (Shutome). The results of respondents with mother in-law’s experience shows about half (48.5%) of the respondents had one time or the other stayed with their mother-in-law. Those that were currently staying with mother in-law accounted for fairly large percentage (36.9%) in the study villages while women farmers without such experience were few in numbers (13.1%). Thus, it shows the importance of the concept of mother in-laws and father in-laws in the study area. Law tagged “Gold Plan” for taken care of the aged parent has been enacted not only in agriculture but for the whole of Japan and its implementation has commenced since 1995 (Fig. 1).

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**Fig. 1:** Past and present status of empowerment women farmers in all indicators
Legal Empowerment (LE): Usually, LE was said to be rarely measured at household and community level. However, respondents’ awareness of their right both within household and community and the ability of individual/group to claim the right were measured in this study. Improvement in the legal empowerment from 66.9% in the past to 67.3% presently was observed. Meanwhile, despite the higher score in this indicator, none of the items used surfaced among the most ten items of respondents empowerment, while one of them (lack of wage for work done on family/husband farm despite the wage payment law) top the list of most ten disempowerment items of respondents.

Mobility Empowerment (ME): Mobility empowerment measures freedom of movement as well as possession of modern means of transportation. Freedom of movement is important for women empowerment, particularly where women presence in public sphere is often severely constrained as the situation of rural women in Japan. This will not only empower women on mobility but will serve as an enabling factor for women’s empowerment in other area of life. The study used seven items to evaluate respondents mobility status. It was interesting to find that, of all the indicators of empowerment considered to measure respondent’s status, women farmers were highly empowered on mobility (almost 80%). This score was 6.4% more than the past score and 18.2, 10.0, 15.4, 12.3 and 16.8%, respectively more than the score obtained in economic, social, familial, legal and political empowerment. Furthermore, almost all its items were among the top ten items of respondents’ empowerment while none of them was part of most disempowerment items.

Political Empowerment (PE): This indicator measures the participation in decision making, ability to be farm manager, opportunity to be manager in agricultural cooperative or representation of their household in agricultural cooperative, awareness of political system of their community and freedom of participation. Generally, few women have affinity in any form of political activities coupled with societal rules and norms which demarcate the role of men and women in the society, such as rules of agricultural cooperative, agricultural committee, farmers leaders etc in Japan. This has made women to rarely surface at the upper echelons of decision making while at the same time they are poorly represented in lower levels of authority. Though, respondents status on this indicator was above average (62.8%) but forty percent of women farmers most disempowerment items were political items while one of its items tops the list of items where women farmers were mostly empowered. Rarely surface of women in political realm is not peculiar to agriculture alone but also visible in secondary sector.

DISCUSSION

On economic empowerment, the major reason stated for their status improvement was the initiation and participation in alternative marketing system of agricultural product. It might also be connected with measures introduced by government to improve rural women status. Non presence of any of its item among women farmers most empowerment items suggests that despite significant roles of the women farmers in agriculture from time immemorial, they have little access/ control on the economic resources and returns from farming activities because they were under the control of their spouse. The implication is that, no matter the extent of work women farmers do on their husband or family farm, it could not be like having personally own means of production as well as total control over the operation and returns from these activities because having access do not reflect total control as pointed out by Manson (1986), ISEC and IIPS (2000) and Kaushik (2001).

Furthermore, drop in the social empowerment could be due to aging problem (average being 60.7 years) in the present study. Moreover, less communication, less activities/events and lack of opportunities in the rural areas presently could also be a contributing factors. The result although confirmed the report of MOFA (2002) and TIWE (2003) that women participation in social activities in agriculture, forestry and fisheries industries was at low level. Meanwhile, the report underscored rural women participation in the informal activities (festival, ceremony, cooking, housework dressing or decoration etc.) which were known to be higher than men. Generally, women participation in social activities is limited particularly in the rural areas; it is often worst if the interaction involve men. Society, culture and beliefs also constitute major factors in social exclusion of women. Irrespective of the stated constraint however, it was established that group can assist in being socially empowered with consequent improvement in position within the family. According to Meguro (2006), participation of Japanese women generally in the society is growing and more women are involved in decision making processes, though the proportion of the whole they represent remains unsatisfactory.

Among the prevailing items of women farmers disempowerment was their inability to divorce. Though, report has it that rate of divorce in Japan is very low compared to the West (America and Europe), the reason for this is not only limited to women’s endurance and culturally unacceptability of divorce concept but because a divorce wife has no legal rights to her husband’s pension and would usually be unable to survive financially should they decide to part ways as explained by Kenyon (2006). Respondents more empowerment in familial indicator supports Takahashi (2000) observation
in which Japanese rural women was reported to rarely express their dissatisfaction simply because the idea of how they should act are formed only by their relation with males in the society. Antagonism between mother in-law (Shinata) and daughter in-law (Yome) does not limited to Japan but cut across all the rural areas in the world as noted by Mies (1999). According to the report, many rural women were of the opinion that marriages fail because the old mother of the farmers does not give enough space to the young couple, particularly the daughter-in-law. They therefore, demanded that the young couple separate its household from that of the old people. The separation concept however, might not be materialized in Japan especially in the rural areas because many household has regarded care for the aged as a role that must be played by women. Hence, women have had the burden to take care of the elderly especially their mother-in-law, whose average life expectancy is more than the father-in-law.

Meanwhile, high literacy level of rural women in particular has increased respondents awareness of their right. Though, being aware of the right might not be as difficult as being able to claim it, particularly in rural areas. Moreover, in the past, there was no power to claim the right. The finding in legal empowerment indicator suggests that, wage payment law to household member who works on family farm have not been implemented in many agricultural household including greater percentage of household in the current study.

In the same vein, agricultural cooperative society still recognized head of the household (male) as its regular member despite all the advocacies that equal chances should be given to both male and female that involve in agriculture. Though, it was learnt that for economic reason, women farmers might decided not to be a full member of the society due to exorbitant membership fee requirement. This reason (exorbitant membership fee) often high, if their spouses are regular member. Moreover, while women farmers know their right, cultural taboos were said to often make them reluctant to claim it. Although without claiming LE, it is often gained through collective action on all other empowerment indicators (Economic, Social, Familial, Mobility and Political) because collective action can lead to alteration of some policies or creation of policies and practice.

Higher empowerment on mobility implies that freedom of movement is crucial to women empowerment, the result also suggests that moving round such as attending Onsen in Japan particularly when it involves group can be a source of women empowerment; as earlier reported by (Green, 1998). The leisure context among women was reported to be an important space for them, to review their lives, assess the balance of satisfactions and activities through contradictory discourses which involves both the mirroring of similarities and resistance to traditional feminine identities. In another context, it was also reported that women talk as friendship through which, feminine subjectivities are secured hence shared humour between women in leisure contexts can be a source of empowerment and resistance to gender stereotypes.

Result shows little improvement in political indicator though could be regarded as an achievement because in the past, no women hold the position of director in corporation in Japan. Nevertheless, the results suggest that there was improvement in their PE presently, but more effort is needed by the respondents to be more involved in political activities. This is because broader participation of women at local level of decision making may be an important first step towards women’s meaningful participation at the national level. Although, local context was said not to be always inherently more democratic or more open to women involvement than national or international levels. The little improvement in women farmers political status however conformed with the National report on Japanese women participation in decision making by Meguro (2006) which increased from 2.4% in 1975 to 30% in 2005. Thus we can say that although it was low but at least improvement was recorded.

Empowerment Index (EI) and opinion sampled on status improvement: Limiting the discussion to the information above might misrepresent the true status of women farmers but further classification explains three category of women farmer status. This was done by computing the empowerment index on indicator basis, as shown in Table 1 where majority were highly empowered on economic, social, familial and mobility but they were moderately empowered on legal and political. However, aggregation of all indicators into a single index revealed greater percentage (59%) of respondents to be highly empowered as shown in the Fig. 2 while lowly empowered respondents were very few (12%).

<table>
<thead>
<tr>
<th>Table 1: Degree of women farmers empowerment status on indicator basis</th>
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<tr>
<td>Indicators</td>
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<tr>
<td>----------------</td>
</tr>
<tr>
<td>Economic</td>
</tr>
<tr>
<td>Low 1-9, Moderate 10-18, High 19-25</td>
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<tr>
<td>Low 1-8, Moderate 9-16, High 17-24</td>
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<tr>
<td>Low 1-20, Moderate 12-40, High 41-54</td>
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<tr>
<td>Low 1-5, Moderate 6-10, High 11-15</td>
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<tr>
<td>Low 2-7, Moderate 8-14, High 15-21</td>
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<tr>
<td>Low 1-12, Moderate 13-26, High 27-35</td>
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<td>Source: Field Survey (2006)</td>
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Fig. 2: Composite empowerment index

The subjectivity of the process of empowerment needs to be extended to measuring empowerment in terms of women’s own interpretation, rather than relying on what is valued by the evaluators or researchers (Kabeer, 1997, 1998). It was emphasized that the process of empowerment should be judged as having occurred if it is self-assessed and validated by women themselves. Hence aside the computed data, opinion of respondents was sought on their perceived present status compared to the past. The outcome shows 50% indicates improvement in their present status while 35% indicates no change. Furthermore, comparison with reference to women in other sectors shows more than half (56.9%) perceiving their status to be similar with non women farmers, 13.1% rated their status to improved than that of non-women farmers while 12.3% stated decline in their status. Thus, women farmers could be assumed to pleased with their work as farmers. Also, further confirmation was made through the coordinators of the market used by the respondents among who were women farmers themselves confirming improvement in their status.

Hypothesis testing: For further confirmation of the result obtained through descriptive statistic, detail assessment was carried out using inferential statistics such as student t-test for significant difference in the respondents present and past status and PPMC coefficient r for the relationship between respondents demographic characteristics and their empowerment status. The difference revealed by descriptive analysis on the familial and legal empowerment was statistically insignificant while that of economic, social, mobility and political were statistically significant (Table 2). On overall however, present empowerment status was different from women farmers past empowerment status.

Correlation results between demographic characteristics of women farmers and empowerment status using PPMC coefficient r indicate negative correlation between the age and all empowerment indicators as well as marital status with familial and legal empowerment (Table 3). This implies that as women farmers advances in age, there is tendency for the decline in their empowerment and vice versa. Truth is the fact that, lack of strength for economic activities, non-socialization due to old-age, self restriction on mobility etc., proves the validity of the test. Aside, since improvement in one indicator can lead to improvement in others, therefore problem with one automatically affects others as well. Marital status also implies that on getting married, their empowerment on the two indicators decreases which might be due to domination by the husband and mother in-law, norm as well as tradition. However, mother in-law has positive correlation with familial and mobility thus staying with mother in-law have positive impact on daughter in-law contrary to negative impact in many literature.

CONCLUSIONS

The paper reviewed status of rural women in Hiroshima and Shimane prefecture of Japan using universal measurement of women empowerment. Specifically, it considers the farming activities as well as demographic characteristics as a background to the study. The status of women farmers in economic, social, familial, legal, mobility and political was discussed. The analyses suggest that women farmers were engaged in various forms of agricultural activities though on a small scale level and their current involvement were increasing despite the old-age of the majority.

Aging of farming household is a general problem in Japan but long life expectancy of women can not be
under-estimated, as this can prone them to economic vulnerability after the death of their husband, whose life expectancy is usually little less. In addition, young female who by virtue of marrying to young farmer or returns to the village for both ascribed and acquired role (taken care of aged parents) automatically becomes farmers themselves, hence rural women’s empowerment generally becomes essential for improvement of their status.

Basically women farmer’s present status was improved while inability to borrow or lend, not getting wage for working on family farm, inability to participate in many political issues top the list of their disempowerment. Above all, analysis shows majority of respondents to be empowered, statistical test also shows significant difference in respondents present status; women farmers perceived their status to improved presently, therefore it can be concluded that women farmers’ status in the study area has improved. This could be attributed to change over the time in economic and family structure. Hence, women’s lifetime exposure to employment and family structure impact empowerment

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