# The Study on Women's Participation in Chinese Chives Cultivation in Imphal East District of Manipur.

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**Abstract**

Women are the backbone of agriculture , in Manipur .Women participation in Chinese Chives cultivation become tradition and practiced in Imphal East , Manipur . Due to rich opportunities for enhancement of income and it suit both marginal and small scale land holder make creation of every women family employment round the year . The average female's work forces contribution in Manipur is 43.43%. Almost all women in rural Manipur can be considered as a farmer in some sense . Women in Manipur work as agricultural labour or work as unpaid agricultural labour in the family agricultural farm.

**Keywords**: Women participation in Chinese chives cultivation

**Introduction**

In Manipur, women economic contribution is also the major share to household requirements. It plays a vital role in the empowerment of economic condition of women Manipur. Imphal-East is the district were Chinese Chives are widely cultivated in Manipur. Cultivation and production was mainly confined in Heingang and Sawombung block of Imphal East district. It cultivation is of a great importance that every house in Kangla and Moirangkampu Sajeb village since the last 17 years.

**Objective**

To study the Personal, Socio – Economic and Psychological characteristics of respondent.

To find out the relationship between Personal, Socio –Economic and Psychological characteristic of respondents with their extent of participation in Chinese Chives cultivation.

To find out the constraints encountered by the respondents in Chinese Chives cultivation.

**Review of Literature**

**Kadlag (1994)** study in "Role of women in decision making in farming in Sangamner Teshil of Ambednagar district " outlined the majority of the farm women belong to the age group of 35 years and above .

**Lekshmi et al. (2015)** study in " Mass media utilization behaviour of farm women" outlined that most of the farm women (63.33%) were middle aged.

**Banerjee and Talukar (1997)** found that the extent of entrepreneurships was positive and significant correlation with the total annual income of the family.

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**Sarasthi and Sumangala (2001)** study outlined that the correlation between the participation of women in sericulture with income and total mulberry land holding was found significant.

**Locale of study**

Imphal - East District of Manipur was purposively selected for the study because in Manipur cultivation of Chinese Chives is mainly confined in the above said district . Its cultivation in Imphal East district play an important role in increasing employment and social economic of many farm families. Selection of villages -The Sawombung block has 61 villages and Heingang block has 67 villages , out of which Kangla and Moirangkampu – Sajeb villages where purposively selected for the study , through complete survey of all the respondent cultivating Chinese Chives.
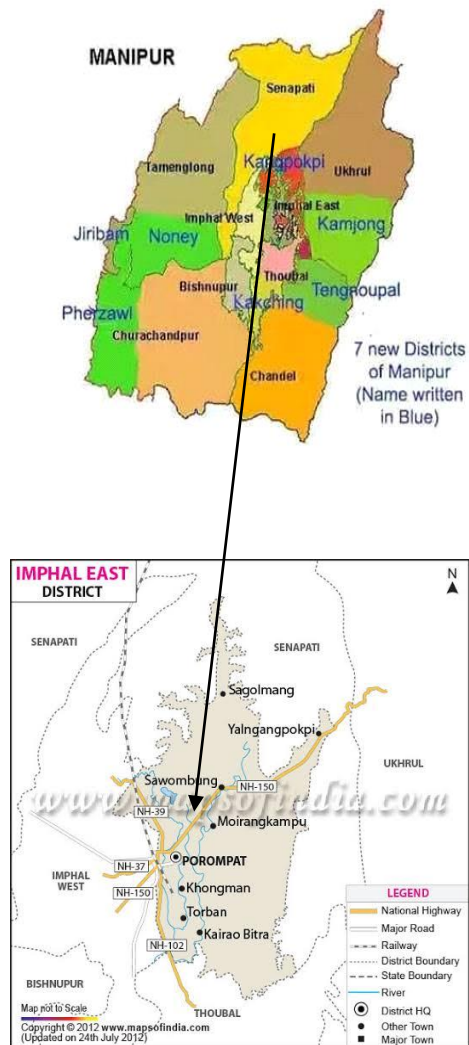


**Data collection -**

Data were conducted by the researcher herself accompanied by the experience farmer of the village. Data were collected from farmers of the respected villages .Variable and measurement are as follow–

## Variables and their empirical measurements

| Independent variables Sl. No. | Variables | Measurement techniques |
|---|---|---|
| 1 | Age | Chronological age of the respondents |
| 2 | Education | Schedule developed by Aparna *et al.*, 2014 |
| 3 | Mass media exposure | Scale by Sagar, 1983 |
| 4 | Family size | No. of family members |
| 5 | Land holding | Scale developed by Basu, 1993 |
| 6 | Decision making | Scale developed by Ray, 1990 |
| 7 | Social participation | Scale developed by Lokhande, 1974 |
| 8 | Training attended | No. of training (s) attended for last 5 years |
| 9 | Annual income | Structure schedule |
| 10 | Decision making ability | Scale developed by John Von Neumann and Morgenstren, 1944 |
| 11 | Achievement motivation | Scale developed by Robert L. Smith |

| Dependent variable | | | |
|---|---|---|---|
| 1 | Overall participation of chinese chives cultivation by the women | 1 . Active participation | 3 |
| | | 2 . Moderate participation | 2 |
| | | 3 . Passive participation | 1 |

## Independent variable

### Age

It refer to the chronological age of the respondent . It is measured in term of approximate number of year completed by a respondent on the date of the interview depending on their reported age , the respondent where group into three category using mean and SD as a measure of check . The respondent where categories as followed

| Category | Score |
|---|---|
| Young age | Less then mean –S.D |
| Middle age | In between mean ±S.D |
| Old age | Greater than mean + S.D |

## Education

For the present study, education of the respondent was conceived to be the individual academic attained in the family through formal schooling. The responses obtain where order into the following categories.

| SI. No. | Category | Score |
|---------|----------|-------|
| a. | Illiterate | 0 |
| b. | Can read and write | 1 |
| c. | Primary level | 2 |
| d. | High school | 3 |
| e. | Intermediate | 4 |
| f. | Graduation & above | 5 |

## Mass media exposure

The exposure of the respondents to different mass media sources were categorized as follow

| Sl | Mass media exposure | Yes 1 | No 0 |
|----|---------------------|-------|------|
| 1 | Newspaper | | |
| 2 | Farms magazine | | |
| 3 | Radio | | |
| 4 | Television | | |
| 5 | Internet | | |

## Family size

It refers to the family size of the respondent measured in term of the total number member in the family , including aged person and children . Family members 1/5 are considered as small families and those with more than 5 members are considered as large family .

| Category | Score |
|----------|-------|
| Small | Upto 5 members |
| Large | 6 above members |

## Land holding

Land is a primary source of livelihood for majority of the rural house hold . land holding is definite as the area ( ha) of land possessed by the respondent or their family . This variable is categories according to the socio – economic status scale of Basu (1993) as given below.

## Social participation

It refers to the degree of involvement in social activity and membership of the respondent and various formal or informal organization , either as a member or as an official bearer. It was measured in term of membership or official status in any formal or informal organization using the scale developed by Lokhande (1974).

| Sl. No. | Features | Score |
|---------|----------|-------|
| 1 | No membership | 0 |
| 2 | Membership in one organization | 1 |
| 3 | Membership in more | 2 |

| | than one organization | |
|---|---|---|
| 4 | Office bearer in one organization | 3 |
| 5 | Office bearer in more than one organization | 4 |

## Training attended

It indicate that has attended any training programme or not during the last five years and if attended , for how many days . Through the training programe women generally gather same new knowledge about the production in infrastructure available . In the present study the attended of women in the training arranged for them was as a measured of training attended . As the women respondent were not able to specified the exact number of days of the training programme attended by them during the last five years , the number of training programme attended by them during the last five year were taken as a measure of their training attended . Based on the mean and S.D of the total number of trainings attended during the last five years , women respondents were categorized as follows.

| Category | Score |
|---|---|
| Low attended | Less then mean –S.D |
| Medium attended | In between mean ± S.D |
| High attended | Greater than mean + S.D |

## Annual income

Annual income **of** women in Chinese Chive cultivation was measured in terms of money earned by the family during one years

| SI. No. | Annual income | Score |
|---|---|---|
| 1 | Below 250000 | 1 |
| 2 | 250000-100000 | 2 |
| 3 | Above 50000 | 3 |

## Decision making ability

It is the degree to which an individual justifies his selection of most efficient means from among the available alternative in order to perform some acts after some consideration of some factors . In order to measure these variable , a scale developed by Rays (1990) was used . The scale containing eight statement was put on a five point continuum viz ., very important , Important , somewhat important , less important and not important with score of 5,4,3,2and 1 respectively . The total score on the scale range from 8 to 40 . The respondent were classified into three categories based on the mean and S.D of the obtain score

| Category | Score |
|---|---|
| Low | Less then mean –S.D |
| Medium | In between mean ± S.D |
| High | Greater than mean + S.D |

## Achievement motivation

In order to measure these variable, a scale developed by Robert l . Smith was used.

| Category | Score |
|----------|-------|
| Low | Less then mean –S.D |
| Medium | In between mean ± S.D |
| High | Greater than mean + S.D |

## Dependent variable

Women participation in Chinese chive cultivation was considered as the dependent variable in these study . In the present context , participation refers to physical involvement of the women in different activities of chinese chives cultivation . Under this dependent variable three sub – variables have been identified , participation in pre harvesting method , participation in post harvesting method and participation in marketing activities .For each sub-variable , three types of participation were assigned viz. active participation , moderate participation and passive participation . Scoring was given for each participation in such a way that score was given for active for active participation , 2 score for moderate participation and 1 score for passive participation.

## Overall Participation of women in Chinese Chive cultivation

It was found that the women respondents differ from one another in their contribution in overall participation of women in Chinese Chive cultivation were group into three categories

| Category | Score |
|----------|-------|
| Passive participation | less than Mean – S . D |
| Moderate participation | In between Mean ± S . D |
| Active participation | Greater than Mean ± S . D |

## Constraints

It refers to the limitation encountered by the women in participating in Chinese chives cultivation. To comprehend the extent of constraints encountered by the women regarding their participation in Chinese chives cultivation, seven problems were set . Each respondent was asked to indicate her opinion on the basis of divided response (Yes /No). If the response was positive, a score of 1 was assigned and a score of 0 was assigned for negative response. The problems faced while participation in Chinese chive cultivation were categorized on the following basis.

| Category | Score |
|----------|-------|
| No | 0 |
| Yes | 1 |

## Formulation of research schedule

The research schedule was the most important tool used in the present study to collect data from the respondents. A research schedule was prepared keeping in veiw the specific objectives of the study. The item in the schedule were selected and formulated after consulting and discussing with the expert from Pandit Deen Dayal Upadhyay Institute of Agricultural Science, Utlou, Manipur. The entire schedule comprised of different tests, scales and indices to measure different Personal, Socio-Economic and Psychological characteristics, extent of women's participation and constraints of the respondents.

## Pre-testing of interview schedule

Pre testing scheduled was proposed for so that it will be capable of eliciting appropriate response from the respondent. In the present study, a suitable structural interview schedule was prepared keeping in the view the objectives of the research. On the basic of the experience gathered through pre- testing, appropriate changes in the schedule was made. Then, the schedule was finalized and used for data collection. The respondents interviewed during pre-testing were not including for the final study.

## collection of data

Collection of data will be from both the primary and the secondary source . Both qualitative and quantitative data were collected for the purposed of the present work . For collected of data from primary source , structured interview schedule was employed . Data were collected from each respondent through single interview method . For collection of data from secondary source different records , reports and journals have been consulted as well as discussed with officials , localities chairman and members .

## Hypothesis of the study

In the light of the objectives of the study and variable selected the relevant hypothesis were formulated on different aspects of the study . The hypothesis was framed in the from of null hypothesis , which stated that there is no relation between the variables according to Kerlinger (1973) . Every research may be said to exist only in order to give the research findings a chance of disproving the null hypothesis. Hypothesis: H0 : There is no significant relationship between the personal , socio-economic and psychological charecteristics of the women and their participation in Chinese chive cultivation

## Statistical tools –

The data collected through the schedule were sorted out, classified , analysed and presented in tables in order to make the findings more meaningful and easily understandable . Interpretation of data was made in accordance with the objectives of the study and inference were drawn . The Statistical tools and techniques used in the study are given below

## Corelation

When an increase or decrease in one variate is accompanied by an increase or decrease in the other variate , the two variates are said to be correlated and the phenomenon is known as Correlation . Correlation coefficient (r) is a measure of the degree of relationship between two variables which are at interval or ratio level of measurement and are linearly related . A Pearson product-moment 'r' is computed by the formula

$$r = \frac{N\sum XY - (\sum X)(\sum Y)}{\sqrt{\{N\sum X^2 - (\sum x)^2\}\{N\sum Y^2 - (\sum Y)^2\}}}$$

Where ,

X and Y = original scores in variables X and Y

N = number of paired scores

EXY = each of X multiplied by its corresponding Y , then summed

$\sum(EX)_2$ = sum of X scores , squared

EY $\qquad$ = sum of Y scores

$EY_2$ $\qquad$ = each Y squared , then summed

$(EY)_2$ $\qquad$ = sum of Y scores , squared

The range of correlation coefficient is from -1 to +1 . This means that -1 is perfect negative correlation and +1 is perfect positive correlation . A correlation coefficient to be acceptable should be statistically significant ; otherwise . It is presumed that no significant relationship exists between the variables

## Regression

It was applied to evaluate the total predictive effect of the independent variables to the dependent variables . The following prediction equation was used in the study :

If y is the dependent variable and X1 , X2 ……………..Xn are the independent variable then , multiple regression equation will be

$$Y = a + b_1x_1 + b_2x_2 + \ldots\ldots\ldots\ldots + b_nx_n$$

Where ,

Y = dependent variable

a = a constant

$b_1$ = partial regression coefficient

$X_n$ = nth independent variables

n = total numbers of independent variables

## Percentage and Frequency

Percentage was used for making simple comparisons . Frr calculating percentage , the frequency of a particular cell was divided by the number of respondents in that category and multiplied by 100

## Standard deviation

It is the square root of the arithmetic mean of the squares of all deviations being denoted by the symbol O ( Sigma ) . It is less affected by the sampling errors and is a more stable measure of dispersion v. The S.D of the data group in the form of a frequency is computed by the formula

$$\sigma = \sqrt{\frac{\sum fd^2}{N}}$$

Where,

f = frequency of the class

d = deviation of the mid - value of the class from the population mean

N = total number of observation

## 3.10.5-Arithmetic mean

It is the quotient that results when the sum of all the items in the series is divided by the numbers of item (N) . It is denoted by

$$X = \frac{\sum X1}{N}$$

Where,

X = arithmetic mean ,

N = no .of items ,

X1= summation of item values

## FINDING AND RESULT DISCUSSION

**Personal , socio – economic and psychological charecteristics of the women .**

When describing the personal , socio – economic and psychological characteristics of the sample respondent , some of the basic parameters have been considered . These are age , education , mass media exposure , family size , operational land holding ,social participation , training attended , decision making ability , leadership preference , achievement motivation and progressiveness .

## Age

The age of women who participated in the study were placed under three categories Majority (72.51%) of women belonged to middle age group followed by young age group (14.11 %) and old age group (13.41%) . The possible reason would be that middle age women are more responsible for managing their family needs , making their household livelihood in every possible way . The findings are partly in conformity with the studies reported by Choudhury et al . (2011) , Supriya (2016) and Dhaka et al . (2017) .

**Distribution of respondents according to their to their age .**

| SL NO . | CATEGORY | FREQUENCY (f) | PERCENTAGE(%) |
|---------|----------|---------------|----------------|
| 1 | **Young age (below 38 years)** | 16 | 14.11 |
| 2 | **Middle age (38 - 60 years)** | 82 | 72.51 |
| 3 | **Old age (above 60 years)** | 15 | 13.41 |
| | **Total** | | |
| | | **Mean=48.51** | **S.D = 11.28** |

## Education

Of the total respondents 40.1 % of women respondents were can read and write followed by primary level 23.7% , high school 22.6% ,graduation & above 7.3 % and intermediate 6.3 % . No respondents were found for illiterate . It concluded that majority of the respondents were can read and write .

**Distribution of respondents according to their education**

| .SL NO | CATEGORY | FREQUENCY(f) | PERCENTAGE (%) |
|--------|----------|--------------|----------------|
| 1 | Illiterate | 0 | 0 |
| 2 | Can read and write | 46 | 40.1 |
| 3 | Primary level | 27 | 23.7 |
| 4 | High school | 25 | 22.6 |
| 5 | Intermediate | 7 | 6.3 |
| 6 | Graduation & above | 8 | 7.3 |
| | Total | 113 | 100 |

**Mass media exposure**

Majority of women mass media exposure in farm magazine 46.2% followed by newspaper 30.1% , radio 17.6 % , television 3.5% and internet 2.6%. Majority of respondent were farm magazine 46.2% .

**Division of respondents according to their mass media exposure**

| SL . NO | MASS MEDIA | FREQUENCY | PERCENTAGE |
|---------|-----------|-----------|------------|
| 1 | Newspaper | 34 | 30.1 |
| 2 | Farm magazine | 52 | 46.2 |
| 3 | Radio | 20 | 17.6 |
| 4 | Television | 4 | 3.5 |
| 5 | Interest | 3 | 2.6 |
| | TOTAL | 113 | 100 |
| | | MEAN = 2.02 | S . D = 0.93 |

**Family size**

Out of 113 women respondents 64.7% of  women belonged to small family and 35.3% belonged to large family . Due to the advent of modernization in the lives of the people in the villages , its observed that small and larges families are more or less equally distributed in the area . The findings are in line with the findings of Munmun et al . (2015) .

**Division of respondents according to their family size**

| SL NO | CATEGORY | FREQUENCY(f) | PERCENTAGE(%) |
|-------|----------|--------------|---------------|
| 1 | Small( upto 5 members) | 73 | 64.7% |
| 2 | Large(6 and above members) | 40 | 35.3% |
| | Total | 113 | 100 |

## Operational land holding

The respondents were classified into different categories as mentioned in the methodology .

| SL . NO | CATEGORY | FREQUENCY(f) | PERCENTAGE(%) |
|---------|----------|--------------|---------------|
| 1 | Upto 1 hectare | 38 | 33.6 |
| 2 | 1-2 hectare | 74 | 65.4 |
| 3 | More than 2 hectare | 1 | 1 |
| | Total | 113 | 100 |

## Social participation

Majority of the respondents have membership in one organizations with (61.4%), (31.4 %) having a membership in more than one organization, (6.1 %) had no membership in any organization (1.1 %) office bearer in one organization. No respondents were found in the categories of office bearer in more than one organization. It can be concluded that women have a strong desire towards social participation. The results are in line with the findings of Moktan and Mukhopadhey (2012).

**Division of respondents according to their social participation**

| Sl. No. | Category | Frequency (f) | Percentage (%) |
|---------|----------|---------------|----------------|
| 1 | No membership | 7 | 6.1 |
| 2 | Membership in one organization | 70 | 61.4 |
| 3 | Membership in more than one organization | 36 | 31.4 |
| 4 | Office bearer in one organization | 1 | 1.1 |
| 5 | Office bearer in more than one organization | 0 | 0 |
| | Total | 113 | 100 |

## Training Exposure

Majority of the women (72.67%) had low exposure, 22% had medium exposure and 5.33% had high exposure. This may be because most of the respondents tend to learn from their elders and their desire to know new techniques is less. They still continue their existing traditional work culture and working methods. The findings are in concordance with the findings of Munmun et al. (2015)

**Division of respondents according to their training exposure**

| Sl. No. | Category | Frequency (f) | Percentage (%) |
|---------|----------|---------------|----------------|
| 1 | Low training exposure | 16 | 14.2 |
| 2 | Medium training exposure | 31 | 27.4 |

| 3 | High training exposure | 66 | 58.4 |
|---|---|---|---|
| | Total | 113 | 100 |
| Mean =2.44 | | SD =0.76 | |

## Annual income

Majority of the women (61.94%) had annual income below 50000, (37.26%) had medium annual income 250000-100000 and (0.8%) had low annual income below 50000.

**Division of respondents according to their annual income**

| Sl. No. | Category | Frequency (f) | Percentage (%) |
|---|---|---|---|
| 1 | Above 250000 | 1 | 0.8 |
| 2 | 250000-100000 | 42 | 37.26 |
| 3 | Below 50000 | 70 | 61.94 |
| TOTAL | | 113 | 100 |
| MEAN =2.61 | | S.D = 0.50 | |

## Decision making ability

Majority of the women (68.3%) have medium decision making ability followed by low (17.6%) and high (14.1%). This might be due to the average level of knowledge and information they possessed. The findings are in line with the findings of Singh et al. (2010), Nataraju (2012) and Supriya (2016).

**Division of respondents according to their decision making ability**

| Sl. No. | Category | Frequency (f) | Percentage (%) |
|---|---|---|---|
| 1 | Low | 20 | 17.6 |
| 2 | Medium | 77 | 68.3 |
| 3 | High | 16 | 14.1 |
| | Total | 113 | 100 |
| Mean =20.49 | | SD = 5.10 | |

## Achievement motivation

Majority of the women (48.6%) have achievement motivation followed by high(46.1%) and low (5.3%).

**Division of respondents according to their achievement motivation**

| Sl. No. | Category | Frequency (f) | Percentage (%) |
|---|---|---|---|
| 1 | Low | 6 | 5.3 |
| 2 | Medium | 55 | 48.6 |
| 3 | High | 52 | 46.1 |
| | Total | 113 | 100 |
| Mean =36.42 | | SD =6.94 | |

## Extent of women's participation in Chinese Chive cultivation

The main focus of the present study was to ascertain the extent of women's participation in Chinee Chive cultivation. The extent of participation in Chinese chive cultivation is presented.

## Overall Participation of women in Chinese Chive cultivation

It was found that the women respondents differ from one another in their contribution in marketing activities. All the women respondents contributed in marketing were group into three categories

It was observed that majority of the women (39.8 %) had active participation in Chinese Chive cultivation activities, followed by (32.7%) moderate participation and (27.5%) passive participation. As the participation of the respondents in all the three aspects of participation in Chinese Chive cultivation activities was active, the overall participation in Chinese Chive cultivation activities was also found to be active.

**Distribution of overall participation of women respondents in Chinese Chive cultivation activities**

| Sl. No. | Category | Frequency (f) | Percentage (%) |
|---|---|---|---|
| 1 | Active participation | 45 | 39.8 |
| 2 | Moderate participation | 37 | 32.7 |
| 3 | Passive participation | 31 | 27.5 |
| | Total | 113 | 100 |
| Mean = 7.2 | | S.D = 1.2 | |

## Conclusion

On the basis of the study conducted, it can be concluded that majority of the farm women had medium level of participation in Chinese Chive cultivation. Chinese Chives cultivation in the study area was taken up as a cultural and traditional way of life without much formal training. Most of the respondents were in the middle age group, literate, mostly belonging to small sized family, having medium land holdings. It was also found that most of the respondents had high training exposure. Besides, the farm women also have strong desire towards social participation and medium decision making ability Education, land holding, family size , social participation and training exposure were the important factors which contributed to the participation of women in Chinese Chives cultivation. The foremost constraints encountered by the respondents was high price fertilizer followed by lack of finance.