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## CHANGING ROLE OF WOMEN PARTICIPATION IN AGRICULTURE: A CASE STUDY OF NAGAR TAHSIL IN MAHARASHTRA

Dr. Maya Unde <sup>1</sup> and Mrs. Sunita S. Gaikwad <sup>2</sup>

<sup>1</sup>Professor and Head, Department of Geography, Ahmednagar College, Ahmednagar.

### ABSTRACT:

*Agriculture is backbone of Indian economy. Women play an important role in development of agriculture. Few decades ago participation of women in the agriculture was only in the form of worker. But after 1990 there is large scale change in role of women in allied sectors, due to awareness in education and social media. Like food processing horticulture fisheries, dairy, marketing of vegetables and cattle foods are the supporting activities that are driving force for women to change her role in rural economy. So at the outset we can say that women play multidimensional role in agricultural activities.*

*The main aim of the present research to throw light on changing role of women in agriculture even through there is disparity in the wages and status. Educational awareness leads to change in participation of women in agriculture. Women workers in Nagar tehsil have been taken for this study. Singh 2012, Damisa 2007 in their research they briefed that though women are more involved in all process of agriculture but their presence is not highlighted. 150 female workers have been interviewed for this study. The data is collected and analysed statistical test like 't' test and correlation is applied for the data and the result are found that there is significant difference between the education awareness and the changing role of women in the agriculture. More than 60% women run the allied sectors. This allied small business has raised their confidence and social status.*

*The study clearly shows active involvement and participation of women in agriculture and allied activities in Nagar tehsil is strong enough where they participate in Self-help group and display their production in agriculture exhibitions. In few places where the villages are in remote areas and accessibility is less female workers participate as traditional labour only. Women have proved that they can transform the total scenario of the agriculture and of the families with the awareness in education and involvement in the society.*

**KEYWORDS:** *women play multidimensional, Self-help group.*

### INTRODUCTION:

Agriculture is important engine in growth as rural economy because women are and main resources in agriculture from the ancient period. As Dr. Swami Nathan said that women to first domesticated crop plant and thereby initiated it

as science as farming. In this paper we try to draw on the available evidences that in which areas and to what degree women participation in agriculture is changed. Role of women is transformed into heterogeneous activities like from labor to owner as shop of agriculture food products. Women have played a key role in the conservation of basics like

supper system such as land and water. Women play an important role in development of agriculture. Few decades ago participation of women was only in the form of wage worker. But after 1990 there is large scale change in role of women in allied sectors.

Like food processing, horticulture, fisheries, dairy, marketing of vegetables and 'canned' food etc. So at the outset we can say that women play multidimensional role in agricultural activities. 70% of the total population is engaged in agriculture.

The main aim of the present research is to throw light on changing role of women in agriculture even though there is disparity. In the wages and status educational awareness leads to change in participation of women in agriculture. 200 women have been interviewed for this study collected data is analyzed test find is applied to find education awareness and the changing role of women in the agriculture. This allied small business has raised their confidence and social status.

Women have proved that they can transform the total scenario of the agriculture and the families with entering in to various sectors to work.

### **Changing role of women:**

Women's role within the agriculture industry has definitely changed in the past 30 yrs. with women being more openly and publicly involved however there is still distance is go.

### **Objectives :**

The main objective of the study is to identify the changing role of women in agricultural activities.

- To find out the information about the role and participation of women in various agricultural and allied activities.
- Identify the types activities carried out by women other than household and labor.
- Identify the factors that lead to transform the type of the activities.
- To suggest the possible training for the rural development.

### **Research Questions:**

- What is the proportion of participates of women in agricultural activities and what activities type of activities they are engaged.
- What are the socio-economic factors that lead to think women about her new role.
- Whether changing role in participation supported women to overcome family problems.

### **Hypothesis:**

Whether changing role of women's participation in agriculture helped for family and economic stability.

### **Significance of the study:**

Contribution of the women account is at high level to secure the family food demand from the beginning.

This study aimed to cover how they have filled the gap of at the same time their role is changed significantly is creating awareness in the society.

This type of study is always significant and important on the society point of view that women who are major driving force of the family who take care of household activities at the same time agriculture activities. But now days with that she is involved in number as skilled and allied activities which support her family to be part as new tracks.

### **Methods:**

The main objective as the perfect research is to find out changing role as women from labor wages is involvement in allied activities.

For this individual questionnaire as 200 women's from different villages in Nagar tahasil have been completed some data also collected from gazelles and Grampanchatyat offices.

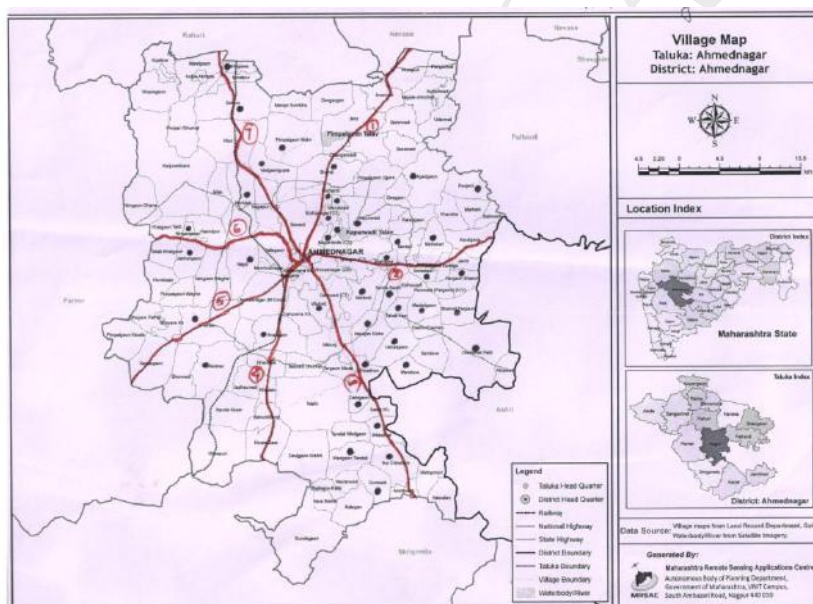
**Data and Methods**

Secondary data from villages and socio-economic abstracts have been taken population and literacy data is taken from 2001 and 2011 census of India. From 20 Villages 200 Women are selected on the basis at their participation in agriculture other than labor. Each Villages represented with 10 females. They are interviewed while working their allied activities. Questionnaire is framed on the basis of objectives and types of supporting in activities which they involved.

General profit of the women like age, education marital status, family size, income is the independent variables which are included in the first part of the questionnaire. Dependent variables like time spend on their activities than household and labor like whatever activity they have selected like marketing of vegetables, seasonal like sugar cane juice, dry foods like vermicelli's, kurdya and so on. Following table shows the number of women engaged in variety of activities. From each village. Descriptive statistics of the data is calculated. Also correlation between education and other activities is carried out. Sample mean and population of the literacy is tested with 't' test.

**Study Area:**

Nagar Tahsil is a third largest tahsil in Ahmednagar district. Total Geographical area of the tahsil is 1605 Sq. km. Lat- Long extent is 19<sup>0</sup> to 19<sup>0</sup> 3' North and Longitude is 74<sup>0</sup> E to 74<sup>0</sup> East. According 2011 census there are 119 villages and two villages are inhabited. Total population of Ahmednagar is 4543159. Literacy rate is 70% of the tahsil 86% as the urban area.



**Map of Study Area**  
(Source: RRSC Nagpur)

**Table - 1: List of selected villages of Nagar Tahsil**

Sr. No.	Name of the Village
1	Agadgaon
2	Akolner
3	Arangaon
4	Bardari
5	Bhatodi Pargaon
6	Burhanagar
7	Chas
8	Chichondi Patil

9	Dahigaon
10	Daula Wadgaon
11	Dehare
12	Gunawadi
13	Hingangaon
14	Islak
15	Jakhangaon
16	Kapurwadi
17	Madadgaon
18	Mehekari
19	Nagardeole
20	Narayandoho
21	Nepti
22	Nimbodi
23	Pimpalgaon Malvi
24	Pokhardi
25	Ranjani
26	Ruichhattisi
27	Sarola Baddi
28	Shahapur
29	Shendi
30	Shingave
31	Shiradhon
32	Sonewadi
33	Takali Khatgaon
34	Takli Kazi
35	Ukkadgaon
36	Wadgaon Gupta
37	Wadgaon Tandali
38	Wakodi
39	Warulwadi
40	Watephal

Out 119 villages 40 villages have been selected for this study. 20 villages selected for questionnaire purpose and 10 questionnaires from each village have been filled. Besides that 20 more villages have visited for observations. Selection of the villages is done on the basis of are the directions like there are 7 major state highways and district roads. Most by the villages are along roadside and observed for last 15 years.

#### LITERATURE REVIEW:

Damisa et.al (2007) focused on participation of women in agriculture, also involvement allied farming activities. They also said that though there are social and economic barriers women are more committed to their household agriculture activities. Mun Mun Ghosh and Arindan (2014) Ghosn analysed the women participants in Indian agriculture throw right on trend of women participation state wise they also observed that women participates is increased and now acknowledged with the status of agricultural workers. Dhaka etal (2010) studied about the knowledge and information flow among women socio-economic progress can be achieved. D. Swami Kannan and C. Jeyalakshmi studied about women labor in agriculture In India and concluded that from 1961 to 2001 female work participation rate has drastically declined from 27.9 % to 25.7 % non-agricultural activities. Nasreen Jahan and Nilofer Khan (2016) analysed participation of women in various agriculture and allied

activities like post harvesting, vegetables, dairy etc. W.M.H. Jaim and Maha bub Hossain changes in women's participation in agriculture in Banglades from 1988-2008 and opined that economic and domestic activities of women have decreased and managerial activities increased.

### Rational:

Participation of woman in agriculture is an engine of growth and poverty reduction where in rural India it is the main occupation.

Role of women varies within regions and changing rapidly in many parts of Nagar tahsil, where economic and social factors force her to change.

In the past few decades participation of women was not "economically active employment" contribution to agricultural output is extremely significant but difficult to quantify with the highest accuracy.

### ANALYSIS OF THE ALLIED ACTIVITIES:

As we all know that role of and her emotional involvement in any household activity is top most priority. In rural India it is very much necessary for women to participate in agricultural activities of our own farm or she needs to go as a labor. As time changed and needs and demands of man also increased it is supporting activity. Rural women is a multitasker in common day to day activities also busy in cooking, help in all pre and post harvesting activities of the owner farm. Depending upon the own capacity education and favorable things she go for various activities which are given in the following table 2.

**Table - 2 : Types of Activities**

Sr. No.	Type of Activity	% of Women engaged in these activities
1	Own farm Activity	72
2	Construction Labour	37
	Bricks plin labour	29
	Tamron labour	17
3	Farm Products	69
4	Seasonal resort	26
5	Live stock	80
6	Hurda(Roasted tender jawar)	28
7	Floor mill	35
	Spices mill	12
	Gram mill	10
8	Organic Grain	06
9	Organic vegetable	08
10	Spices And Pickle	58
11	Weekly market	62
12	Self-help group	37
13	Vermicelli / Kurdai	81
14	Pattal (Pantarwali)	02
15	Nursery	07
16	Khava	14
17	Fishing	05
18	Sugar cane juice	37
19	Glossary shop	18
20	Coconut /flower/joss/incense stick	05



21	Chilling plant	01
22	Tailoring	42
23	Canned Food	57

From 20 villages 23 types of activities have found while interviewed the women, few activities are seasonal like sugar cane juice, amla candy and other products.

### Description of the activities:

Participation of women as a labor is priority because of their own farm. Besides that most by women's go as a construction labor because whole family husband-wife and children can work together same is the reason given by the families work in brick industry as a labor. But there is difference in wages. Males get more than 400-500 rs. per day and from females it is 250-300 Rs. Then seasonal labor as a tamarind collection females only go and the reason they can work under shadow though the money is less. Villagers close to Nagar are involved in this type of activity farm product like vegetable, eggs or grains can be selling in house almost at every house.

Seasonal resorts and Hurda Party are the places where womens work as a cook and earn 300 Rs. / day but it is less hard and in house job. Besides they can take care at their small children's. All types' mills run in the house or outhouse at area. Floor mill is regular but gram mill and spices mills are seasonal. Woman prefers this also in the form of self-help group that they can work turn by turn. Village chas, Nimblak, Kamargaon, Nimbodi having more mills. Organic grains and vegetables have market in urban areas. Dehare, Shingve Naik, Chas, Vilad, Arangaon are engaged in this most at women participate weekly markets with eggs, grain, vegetables etc.

Vermicelli, Kurdai, Vade, Papad all are only in the summer and 80% villages women participate because there is no farm work in the summer. Besides demand for this product is on large scale from rural and urban people. This products also send to self-help group exhibitions. Amla products and Masala also send with this to urban places. Agadgaon, Baradani, Mehekari Ranjani are famous to prepare patiets (patrevali) out at palas leaves, throughout the year. It also has large demand from rural and urban places to use as food place.

Fishing is carried out at Baradani, Burhanahar, Pimpalgaon malvi, Kapurwadi. Nursery is at Dehare, Villad, Chas on the highway villages where supply of water is available. 40% womens do teylering work since it can be done at home and according to their leasure time. Dairy and milk product also carried out at villages like Sarola, Kolhewadi.

Own farm products, like stock, spices, weekly market and summer products shows almost 80% involvement. Flourmills, organic food, patterns show the lowest percentage.

**Table - 3 : Village wise Involvement**

Sr.no	Dominant activity	Village name	No of women
1	Labour	Shendi	30
		Pokhardi	31
		Ukkadgaon	25
		Wadgaon Gupta	21
		Wakodi	20
		Warulwadi	20
		<b>Total</b>	<b>147</b>
2	Sugarcane juice	Chas	09
		Dehare	10
		Hingangaon	05
		Jakhangaon	04
		Nepti	02
		Nimbodi	03

		Ruichhattisi	07
		Sarola Baddi	01
		Shendi	05
		Shingave	04
		Takali Khatgaon	02
		<b>Total</b>	<b>52</b>
3	Fishing(sell)	Bardari	10
		Bhatodi Pargaon	06
		Burhanagar	04
		Kapurwadi	03
		Pimpalgaon Malvi	07
		<b>Total</b>	<b>30</b>
4	Grocery shop	Akolner	02
		Dahigaon	01
		Gunawadi	02
		Islak	01
		Nagardeole	04
		Narayandoho	02
		Shahapur	01
		Takli kazi	03
		Wadgaon Tandali	02
		<b>Total</b>	<b>18</b>
5	Weekly Market	Arangaon	25
		Burhanagar	24
		Chichondi Patil	32
		Dehare	24
		Ruichhattisi	27
		Shiradhon	20
		Takli kazi	22
		<b>Total</b>	<b>174</b>
6	Pattal (Patrawali)	Agadgaon	10
		Bardari	06
		Mehekari	03
		Ranjani	08
		<b>Total</b>	<b>27</b>

### Education level of the women

And number of women in each level is also given in table No 4.

**Table - 4 : Education composition of selected villages**

Sr.no	Education	No. of women
1	Illiterate	13
2	4 <sup>th</sup>	38
3	6 <sup>th</sup>	37
4	8 <sup>th</sup>	19
5	10 <sup>th</sup>	47
6	12 <sup>th</sup>	34
7	Graduate	12

**Graph showing Education level of women in selected villages  
Female population and literacy - 2001**

Sr. No.	Village	Population	Female	Female %	Female literacy rate %
1	Agadgaon	2156	968	44.69	56.25
2	Akolner	3065	1051	34.29	59.70
3	Arangaon	5213	2103	40.34	77.90
4	Bardari	656	295	44.96	58.10
5	Bhatodi Pargaon	1954	865	44.26	59.95
6	Burhanagar	5957	2451	41.14	65.13
7	Chas	3992	1718	43.03	31.74
8	Chichondi Patil	5792	2054	35.46	58.77
9	Dahigaon	998	420	42.08	57.97
10	Daula Wadgaon	1968	864	43.90	56.07
11	Dehare	4920	2134	43.37	61.27
12	Gunawadi	1021	520	50.93	59.52
13	Hingangaon	1102	561	50.90	65.92
14	Islak	1159	495	42.70	52.51
15	Jakhangaon	1244	523	42.04	54.00
16	Kapurwadi	3265	1102	33.75	53.49
17	Madadgaon	985	354	35.93	50.69
18	Mehekari	1984	756	38.10	52.58
19	Nagardeole	14582	7022	48.15	58.85
20	Narayandoho	2015	984	48.83	61.75
21	Nepti	3564	1852	51.96	62.63
22	Nimbodi	2584	956	36.99	60.55
23	Pimpalgaon Malvi	4754	1985	41.75	60.84
24	Pokhardi	3654	1854	50.73	58.85
25	Ranjani	2567	986	38.41	51.27
26	Ruichhattisi	2678	1002	37.41	55.82
27	Sarola Baddi	865	359	41.50	71.46
28	Shahapur	602	215	35.71	59.92
29	Shendi	3658	1702	46.52	68.84
30	Shingave	1654	785	47.46	65.18
31	Shiradhon	985	458	46.49	65.06
32	Sonewadi	984	359	36.48	63.74
33	Takali Khatgaon	1865	725	38.87	67.71
34	Takli kazi	856	423	49.41	68.48
35	Ukkadgaon	653	251	38.43	60.08
36	Wadgaon Gupta	6812	2845	41.76	58.58
37	Wadgaon Tandali	7564	3021	39.93	66.26
38	Wakodi	3750	1543	41.14	67.61
39	Warulwadi	654	258	39.44	66.53
40	Watephal	865	354	40.92	67.45

**Female population and literacy - 2011**

Sr. No.	Village	Population	Female	Female %	Female literacy rate %
1	Agadgaon	2978	1445	48.05	67.25
2	Akolner	3846	1851	48.01	69.70
3	Arangaon	6158	2934	47.06	77.90
4	Bardari	1004	475	47.03	79.10
5	Bhatodi Pargaon	2655	1287	48.05	67.95
6	Burhanagar	6885	3257	56.02	80.13



7	Chas	4610	2219	48.01	71.74
8	Chichondi Patil	6147	2978	48.04	69.77
9	Dahigaon	1453	668	46.00	69.97
10	Daula Wadgaon	2226	1057	47.48	69.07
11	Dehare	5750	2836	49.32	72.27
12	Gunawadi	1567	758	48.37	68.52
13	Hingangaon	1672	810	48.44	75.92
14	Islak	1604	780	47.56	61.51
15	Jakhangaon	1896	927	48.89	67.00
16	Kapurwadi	4152	1987	47.09	65.49
17	Madadgaon	1301	620	47.65	61.69
18	Mehekari	2752	1321	48.00	65.58
19	Nagardeole	18802	9034	48.04	69.85
20	Narayandoho	2849	1357	47.63	71.75
21	Nepti	4333	2264	47.83	71.63
22	Nimbodi	3161	1556	49.02	70.55
23	Pimpalgaon Malvi	5732	2752	48.00	71.84
24	Pokhardi	4132	2141	51.81	69.85
25	Ranjani	3369	1602	47.55	61.27
26	Ruichhattisi	3586	1722	48.02	66.82
27	Sarola Baddi	1404	651	46.04	80.46
28	Shahapur	938	454	48.40	68.92
29	shendi	4271	2055	48.01	78.84
30	Shingave	2224	1083	48.69	73.18
31	Shiradhon	1693	818	48.03	73.06
32	Sonewadi	1599	785	49.09	72.74
33	Takali Khatgaon	2512	1217	48.44	78.71
34	Takli kazi	1763	878	49.08	75.48
35	Ukkadgaon	1432	700	48.09	70.08
36	Wadgaon Gupta	7192	3435	47.76	76.58
37	Wadgaon Tandali	8203	3874	47.22	77.26
38	wakodi	4012	1928	48.01	78.61
39	warulwadi	1031	488	47.03	75.53
40	Watephal	1425	678	47.57	77.45

### Age composition of selected villages

Sr. No.	Age group	No. of women
1	20-30	23
2	31-40	92
3	41-50	58
4	51-60	27

### Age Composition of Selected Villages

Maximum Women are found educated in 10th standard and percentage of illiterate and graduate is almost same.

There are number social and family factors which are responsible for the development of women like family support social status, economic stability, education. Out of 200 women 167 women's answered that family support is important factor while 13 said that we are independent we can select our duties and 20 answered that our family never support for this type of jobs.

For the analysis of Questionnaire literary and other allied activities have been considered. There are number of factors which made women to transform their role of being only house wife. Monetary need in is the first priority that females are involved in participating various social groups.

**t-Test :**

Literacy or education awareness is the important factor for women while entering for other sectors of economic sources. For this 't' test carried to find out significance difference between literacy of the Nagar tahsil and of the 20 villages for 2001 and 2011.

It is found that in 2001 the calculated value is 4.46 which is more than table value at 0.05 (2.02) and 0.01 (2.7) level hence  $H_0$  hypothesis is rejected means there is no significance difference between both sample and population. Same test is also applied 2011 data and found that calculated value 2.2 which show that at 0.05 level  $H_0$  is rejected at 0.01 level  $H_0$  is accepted means there is significance difference between literacy level of sample villages and tahsil. At the outset we can say that education matters a lot for women to involve in social sectors.

**FINDINGS:**

- All the 200 women's are happy that they are supporting their families.
- It also proved that family income is increased by 50% stated by all. So that they can give better education to the students.
- Participation other than agricultural labor has changed their role only of house wife.
- This financial support change their personality, confidence level and socio-economic status in the society.

Farming has been traditionally viewed as a male dominated but now the situation is changed today's rural women realize the importance of acquiring new knowledge learn new technology and finding new ways and opportunities to make money for sustainable development.

70% of total population is engaged in agriculture. Female percentage is more than 75% and male more than 65% engaged in agriculture. It is observed that women play a significant role in agriculture development and allied activities. The present paper shows that the contribution of women in agriculture is extreme significant

Before 3 decades women's role in agriculture was only to depend on husband for everything regarding farm or family matter. The reason behind it is that she was not educated, not economically independent, no social status no participation in the society etc. But now since there favorable factors for women to participate and earn her own money with hard work, being good organizer and communicator India society realized women's efforts by supporting her to engage in allied activities. The purpose of this study is to find out the nature as activities and their participation to support the family.

Forty villages out of 119 have been selected. Sample villages selected along the major roads going from Ahmednagar Tahsil. 10 questionnaires from each village have filled and the data is also collected in weekly markets at few villages. In which women are already doing small business. These sectors are classified into 4 categories based on education.

**Limitations of the study:**

- Collecting necessary information is difficult.
- Data is qualitative there fort application at statistical techniques has limitations.
- More categories of the data is required.

**SUGGESTION:**

Suggestion for the recognition of women contribution in agriculture

- More facilities for allied activities.
- Separate education Policy.
- Training for alternative skills.
- Low interest credit to start self-employment.

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**Photographs:**



**Dr. Maya Unde**  
Professor and Head, Department of Geography , Ahmednagar College, Ahmednagar.



**Mrs. Sunita S. Gaikwad**