

Participation of Female Workers in Agriculture Activities: A Case of Ratnagiri District (M.S)

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Abstract

Present Study was intended to understand the assess participation of female workers in agricultural activities in Ratnagiri district of Maharashtra state. Required data was collected through secondary data sources and analyzed according to the objectives of the study. A result shows that, there are large numbers of women cultivator in the region since adult male workers migrate to nearby urban centers for jobs. On the whole occupational distribution pattern of population symbolizes the true character of an under developed agrarian society. Amongst more than 9 lakh female workers in the district; 39.52 percent (3, 56000) are engaged in agriculture activities, and they receive their livelihood from agriculture. However, these female workers are facing various problems in agricultural occupation.

KEYWORDS: Female Workers, Agricultural, Participation, Problems

Introduction

As like men women are also an important entity, who constitute half of the world's population. Still they are the largest group which is neglected and excluded from the benefits of the development in India. The work participation rate of women is less than that of men though they are the embodiment of "Shakti" and are the equal partners. According to 2001 census, women numbers about 498.7 million which represents 48.2 percent of the country's population. They are the important human resource and constitute 31.56 percent of the economy (Datt and Sundharam, 2009).

Agriculture, in our country has been providing employment to around 60 percent of total workforce the role played by the women in agriculture is also notable one, who forms an important workforce in agriculture field. By analyzing various roles played by women as farmers, farm wives & agriculture professionals we can legitimized the idea of women as productive partners in agriculture.

Though this is the situation, it is well known fact that, the women in India do not engage themselves in gainful economic activities and hence their participation in labor force is very small. Females in our country feel unable to adjust themselves suitable to all occupations because of their certain limitation and social constrains. Most of female workers especially in rural areas are employed mainly in agriculture and allied activities, while their participation in secondary and tertiary occupations is meager.

Owing to this an attempt has been made to analyze the nature, magnitude and geographical variation of female participation in the selected study area.

Review of Literature

Prasad (2006), mentioned in his A comprehensive analysis of plan wise development in agriculture is explained in detail which is helpful to extract the

situation of agriculture on various angles. “ Role of Farm Women in Agriculture : Lessons Learned ” Satyavathi et al (2010) explained the extent of female workforce engaged in agricultural operations , household technology required for farm women , training needs, production resources , innovative strategies for future is explained in this article which is helpful to trace out the problem.

Manabendu Chattopadhyay (1982) mentioned that, the labor the women can provide for cultivation for various crops, planting, harvesting, post harvest operations is explained . According to FAO the benefits of modernization of agriculture have benefited the wealthy more than the poor and men more than women. Kaur and Sharma (2002), mentioned that, Training of women in animal husbandry is found to be totally neglected. The level of improved household technology, too, is very unsatisfactory, more especially in backward regions where the majority of women are still working with age-old tools. Over half the respondents had no leisure time.

Pandey (2010) posited that, rural women play a significant role in agricultural development of India. Under agricultural activities, starting from field preparation they were participated in different farm activities like sowing, weeding, manure and fertilizer application, harvesting and storage etc. It was found that maximum participation of women is in plantation (86-6%), secondly in harvesting (85-4%) storage (73-4%) women participation was found least in irrigation (13-8%) and fertilizer application. (8.2%)

Study Region

Ratnagiri district is one of the coastal district of Konkan regions which form a narrow strip running from north to south along the western coast of India. It lies between 16.31' to 18.04' North latitude and 73' 02' to 73' 52' East longitude .The district has north south length of a about 180 K.M. and average east west extension of about 64 K.M. except in its extremities which tapers to join the coast line. This district is surrounded by Sahyadri hills in the east beyond which there are Satara, Sangli and Kolhapur district, raged district in the north, the Arabian Sea in the west and Sindhudurg district in South.

Objectives

1. To study the agriculture situation of the study area.
2. To understand the magnitude of female workers and their participation in the present study area.
3. To suggest the suitable measures for the further improvement of conditions in the study area.
- 4.

Methodology

For the present paper, a case study method is used. The Ratnagiri district of Maharashtra has been selected for the case study. This district lies in Konkan Region of the state, which has outstanding females as cultivators. This hilly area make the richest zone of female participation in labor force, since majority of male members from the district migrate to Mumbai and Pune for jobs as well as there is little urbanization and adverse agricultural condition in the district.

The study is entirely based on secondary source of data, which is collected from governmental records and libraries; discussion with the local citizens is also followed along with personal observation by researchers.

Brief profile and the Agricultural Situation in Ratnagiri District

Ratnagiri district is one of the coastal district of Konkan region which forms a narrow strip running from north to south along the western coast of India. It is between 16.31' to 18.04' North latitude and 73' 02' to 73' 52' East longitude. The district has north south length of about 180 K.M. and average east extension of about 64 Km. except in its extremities which tapers to join the coast line. The district is surrounded by Sahyadri hills in the east beyond which there are Satara, Sangli and Kolhapur district, Raigad district in the north, the Arabian Sea in the west and Sindhudurg district in the South.

Considering the physical features, Ratnagiri district can be divided into three parts.

1. Hilly area of Sahyadri and its offshoots.
2. Plateau surface which is used for cereal crops like rice and nagli
3. Coastal plains where the coconut and areca nut crops thrive well.

Over 85 percent of the land surface in Ratnagiri district is hilly. All rivers in the district originate in the Sahyadri ranges and flow from the east to west and merge with the Arabian Sea. The important rivers of the district are Vashisthi, jagabudi Bay and Naringi. The total geographical area of the district is 8.183 lakh Ha. Out of which 27.56 percent area is under cultivation, 14.06 percent uncultivated, 0.8 percent under forest, 10.00 percent under pasture and miscellaneous plantation 23.40 percent under non agricultural use and 22.55 percent is barren and uncultivable waste.

Ratnagiri district is divided into nine blocks with a total of 1516 villages and 837 Grampanchayats. The total population of the district in 2001 was 1696482, out of which 794431 were male and 902051 were females. There is very little urbanizations. Only 8.94 percent population is urban and 91.06 percent is rural. The density of population per square is 187 as against 257 for Maharashtra. The overall literacy percentage district is 62.70. The literacy percentage is high in male. (76.64.percent) than female (51.61 percent) The data about workforce engaged in agricultural indicate that 8.9 lakh are agricultural laborers while 6.94 lakh are engaged in non agricultural activities. The proportion of S.C's and S.T's was quite low i.e. 2.72 percent.

The predominate soil in the district are lateritic which vary in colour from bright red to brownish red, owing to the preponderance of hydrated iron oxides. They are always acidic and fairly well supplied with nitrogen and organic matter. They are porous, non retentive of moisture and are found all over the district except in Mandangad tahsil. The soils are found in several grades. The main grades are:

- a) Soils useful for cultivation of paddy.
- b) Coastal alluvial, useful for coconut and areca nut gardens.
- c) Varkas soils, useful for mango and cashewnut cultivation.
- d) Saline lands locally known as Khar land or Khajan, salt tolerant rice varieties can be grown.

Climatic conditions in the district are strongly influenced by its geographical condition. Being a coastal district, variation in the temperature during the day and throughout the season is not large. Maximum temperature at the coast rarely goes beyond 38.C and in the interior; it seldom crosses 40.C owing to proximity to the sea. Climate of the district is very humid and relative humidity seldom goes below 50 percent.

Total rainfall and its month wise distribution is an important factor affecting crop production and land use intensity. The average annual rainfall in the district is 3787 mm. nearly 91 percent of rainfall is received in four months. i.e. June to

September. Therefore, crop production is concentrated only in Kharif season and there is very little cropping in rabi or hot weather seasons. Since, the rainfall during four month coupled with lateritic soil has imposed restriction on availability of irrigation facilities and also drinking water in summer season. There are some post monsoon rains in October and November, which enable growing some Rabi pulses and vegetables after harvest of Kharif rice on residual moisture.

Ratnagiri district is not homogenous in respect of topography, rainfall, temperature, soils, agricultural condition and resource endowment. There are some variation in land use pattern, dominate crops, irrigation facilities available, fishing activity, forestry, etc. Therefore for the purpose of planning classifying the area into more homogeneous agro ecological situation is worthwhile for identifying common resource based and common needs.

There are nine Tahsil in Ratnagiri district. Each block is having different agro ecological situation. Thus, the Ratnagiri district is divided into six agro-ecological situations. 1. North Coastal Zone 2. North Plateau Zone 4. South Plateau Zone 5. North Hilly Zone 6. South Hilly Zone. The distribution of operational land holdings in Ratnagiri district given in the following Table-1.

	Size of Holdings	Operational Holding (No. and area in Ha.)			
		Number Holding	Percent of Holding	Area (ha)	Percent area
1	Marginal (unto 1.00 Ha)	14707	7.85	51046	6.56
2	Small (1.0 to 2.0 Ha)	84299	44.99	150924	19.41
3	Medium (2.0 to 4.0 Ha)	34761	18.55	134081	17.24
4	Large (4.0 to 5.0 Ha)	13929	7.43	62174	7.99
5	Very Large (above 5 Ha)	39694	21.18	379503	48.80
6	Landless (number only)	55500	-	-	-
Total		187390	-	777728	-

Source Ratnagiri district Websites: www.ratnagitidistrict.co.in

The total number of holdings in the district is 187390 with an area of 777728 Ha. The peculiarity of land holding in the district is that nearly 8 percent holdings are marginal and 45 percent holdings are small resulting in to high proportion (53 percent) of marginal and small farmers in the district.

Those farmers, who have medium and large holdings, posses mostly lands on hill slopes and less fertile lands, which are locally known as 'Varkas' lands. Although the proportion of such farmers is small, they posses large proportion (57 percent) of total area. This also shows that there is some inequality in the distribution of land holdings. There is only one medium irrigation project exiting in the district, which is situated at Natuwadi in Khed tahsil. All other reaming 17 irrigation projects are of minor type.

Out of 1519 villages, 1515 villages (99.37%) are electrified. The electricity consumption in the district was 454830 thousand -Kilowatt hours. Out of this, 27.75 percent was used for domestic purpose, 10.53 percent for commercial purpose, 58.79 percent for industries, 1.06 percent agricultural and 1.33 percent for public street lights and other uses.

In Ratnagiri district, there are three modes of transport i.e. road, railway and sea. However, most of the transport is by road, followed by railway and very limited by sea. The roads in the district are constructed and maintained by the Government, Zilla

Parishad and Municipalities. The Mumbai Goa National Highway (NH-7) passes through the district.

Regarding communication, 1519 villages have post and telegraph services available through 639 post Offices and 152 Telegraph Office. On an average one lakh population is served by 42 Post Office. In addition, there are 23,884 telephones working in the district. The telecommunication facility is expanding very fast in district.

In the year 1998-99 there were 1277 cooperative institution with 5,23,000 members Out of the total co-operatives, 378 (30%) were primary agricultural credit societies. The total non agricultural credit societies were primary agricultural credit societies were 200(15.66%) and 695 (54%) were non-credit societies.

There are 378 primary agricultural credit societies in the district with a membership of 2, 28, 000. The numbers of borrowers are 41,603 who borrowed 674.55 lakh of short term. Medium term and long term loans. The proportion of borrowers is quite low (18%) with average amount of Rs. 1621 per borrowers. In addition, long term finance is also provided by the Co-operative Land Development Bank to the extent of Rs. 1199.83 lakh.

There is a District Central Co-operative Bank and Urban Co-operative Bank (75 branches) in the district. There are 14 other banks in the district with 103 branches. The Bank of India is the Lead Bank of the District.

There is one regulated market at Ratnagiri, but now it is not functioning as there is no marketable surplus of rice and nagli, which are the important cereal crops, Ratnagiri district is deficit in food grain production. Mango is a commercial crop sold in important city markets like Mumbai, Pune, etc. by the cultivator and pre harvest contractors through commission agents. Local sale is negligible. Therefore the market has not been functioning.

The storage facilities available in the district are mainly provided by the district Collector at each block (tahsil) i.e. nine storage for grain. There are four cold storages available in the district for perishable products such as milk and milk products.

There are sixteen farmer groups and organization prevailing in the district. These group and organization are mainly associated with agricultural and water supply (Pthan & Mangnale, 2004),. The groups for agricultural are mainly involved with the activity regarding supply of agricultural inputs to the farmers, fruit processing of cashew nut and processing and marketing of cashew nut seed and supply of irrigation water through the lift irrigation schemes.

Dr. Balasaheb Sawant Konkan Khrishi Vidyapeeth, Dapoli (the erstwhile Konkan Krishi Vidyapeeth) was established on 18th May, 1972 to cater the needs of teaching, research and extension education in agriculture and allied sector in the Konkan Region. The jurisdiction of the University extends over five districts namely. Thane, Raigad, Ratnagiri, Sindhudurg and Greater Mumbai. The region has hilly terrain and extensive sea coast of 720 Km. it receives heavy rainfall reining from 2000 to 4000 mm. mostly during the months of June to September. The climate is warm and humid almost throughout the year. The lateritic soil from Ratnagiri and Sindhudurg district are acidic, less fertile, having low moisture retention capacity, whereas the medium black soils from Thane and Raigad district are comparatively better in fertility and moisture retention capacity.

Magnitude of Women Workers:

In Ratnagiri District women play a multiple role. Firstly they confine themselves to their home working as housewives and simultaneously at their farms as agricultural workers. This district makes the richest zone of female participation in labor force. According to 2001 census, the entire population of the district was divided into three board categories.

1. Main workers
2. Marginal Workers
3. Non workers

The main workers have been classified into four occupational categories:

1. Cultivators
2. Agricultural
3. Working in household industry
4. Other workers.

There are 7,63,387 person-4,06,780 males and 3,56,607 females engaged in economic activities and form the labor force of the district. Thus women share 39.5 percent in the total working population. The position of women in the household is an integral part of the social structure. It is only by some kind of subjective judgment, influenced by tradition and prejudice that a women even when she participates in the economic activities of the household is reported a worker or a non worker.

Hence some of the women reported not working might indeed be working and participating in economic activities of household. But the fact remain that the participation of women in economic activities of the household is limited first by the demands of the household duties not considered economic and secondary by the demand for labor in the economics activities (Dandekar-1982:1783) it is also a fact that women participation in economic activities of the household can be increased only at the expenses of household duties and by reducing men's participation in economic activities. The real hurdle in the way of women participation in economic activities and integration in economic development is the subordinates status that has been assigned to women in the male dominated society of the country.

Participation in Agriculture:

The distribution of the workers by sex in four categories of economic activities in Tahsil of the District has been given in the following table.

	Name of C.D Block	Person Males Population	Total Population	Total no. of workers (Main+ Marginal)	Category of workers			
					Cultivators	Agri. Laborers	Household Industries Workers	Other Workers
1	Mandangad	person	70593	20225	18405	4182	495	7143
		Male	31410	14724	7111	1750	316	5547
		Female	39181	15501	11294	2432	179	1596
2	Dapoli	person	193430	80109	35220	13104	1876	29909
		Male	88093	42282	13084	5165	1128	22905
		Female	105337	37827	22136	7939	748	7004
3	Khed	person	194515	80247	44086	10276	1384	24501
		Male	91710	44303	18815	4307	977	20204
		Female	102805	35944	25271	5969	407	4297
4	Chiplun	person	281081	119538	60328	13459	2765	42986

		Male	135062	68218	25192	5793	1693	35540
		Female	146019	51320	35136	7666	1072	7446
5	Guhager	person	142259	66389	31778	7905	947	25759
		Male	66724	35641	10141	2894	512	22094
		Female	75535	30748	21637	5011	435	3665
6	Ratnagiri	person	302261	125556	42358	18771	2836	61591
		Male	148056	77862	18050	8582	1448	49782
		Female	154205	47694	24308	10189	1388	11809
7	Sangmeshwer	person	214819	104510	67250	14750	1604	20861
		Male	98109	50300	26979	5555	1055	16711
		Female	116710	54210	40271	9238	551	4150
8	Lanja	person	113153	58486	39625	6998	873	10990
		Male	51866	27651	15486	3132	584	8449
		Female	61287	30835	24139	3866	289	2541
9	Rajapur	person	184666	98327	63511	12457	2201	20158
		Male	83466	45799	24303	4737	1187	15572
		Female	101200	52528	39208	7720	1014	4586
	District Total	person	1696777	763387	402561	101945	14983	243898
		Male	794498	406780	159164	41915	8900	196804
		Female	902279	356607	243400	60030	6083	47094

Sources: District Census Handbook: Ratnagiri 2001

Amongst more than 9 lakh female workers in the district 39.52 pc (3,56000) are engaged in agriculture activities, and they receive their livelihood from agriculture. In the district, about 68.3 percent women workless are cultivators. This percentage is more than double when it is compared to men cultivators, whose percentage is merely 39.1 percent. The percentage of men workers working as agricultural laborers on other's fields or wages is 10.3 percent while this is more amongst female workers i.e. 16.8. Only 1.7 percent and 13.2 of total women work force is employed in household industries and in other activities respectively.

Geographical Variation in Female Participation

Geographical diversity and socio economics variations of Ratnagiri district has resulted in to the variation of participation of women workers in agricultural activities. Considering the Physical features Ratnagiri district can be divided in to three parts. This is given in detail in the following table-2.

Coastal Zone	Plateau Zone	Hilly Zone
Mandangad (w)	Dapoli (E)	Mandangad (E)
Dapoli (W)	Khed (W)	Khed (E)
Guhagar (W)	Ghugar (E)	Chiplin (E)
Ratnagiri (W)	Ratnagiri (E)	Sangmeshwar (E)
Rajapur (W)	Chiplun (E)	Lanja (E)
	Sangmeshwar (E)	
	Lanja (W)	

Source: Ratnagiri District Website E = East W= West

1.Coastal Zone:

The soil in this region is lateritic which vary in color from bright red to brownish red this type of soil is useful for coconut, areca nut mango. Some part of Costal Zone has saline soil also. This region comprises 51-68 percent of female

workers (including eastern and western parts), while 48-71 percent constitute the cultivators.

2. Plateau Zone:

This zone has alluvial soil which is useful for paddy cultivators. It also consists of some saline land which is locally known as 'Khar' lands or 'Khajan' where salt tolerant rice varieties are grown. About 81 percent of the workers in this region are female workers the number of cultivators is about to equal to the number of female workers who constitute 79.25 percent.

3. Hilly Zones:

Some of the Tahsil form this block consists of sodic and alkaline soil. Mango is largely grown in such areas. Besides, the cashew nut is grown in this region. Those farmers who have medium and large holdings possess mostly lands on hill slopes and less fertile lands which are locally known as 'Varkas' lands. Percentage of female workers in this region is 52.66, while the percentage of cultivators is 44.63.

Factor Influencing Female Participation

Women in Ratnagiri district play variety of roles such as agricultural workers; cultivators; housewives; caretakers and so on. Their participation in agriculture is affected by large many factors. Some among them are as follows.

A backward economy is always dominated by primary or agricultural activities, while in developed economy, secondary, tertiary and quaternary services are more important. Hence the participation in agriculture also counts on the level of economic development of a region (Rane and Deorukhkar, 2007). Since Ratnagiri lies in hilly and coastal areas, job opportunities in non agricultural pursuits nearly nil for women. In such a way poor women are bound to engage themselves in agriculture and allied activities.

Literacy and Education are most influential factors determining women's occupation. Education and training encourage rural to urban migration motivated by the objective of acquiring prestigious non agricultural to diversified non agricultural fields. Since low literacy and low education in Ratnagiri district, specially amongst rural women they have engaged themselves in agriculture.

Urbanization as process of change and development plays a vital roles in determining the livelihood structure of men and women in the area, urban occupations differ to a great extent from rural ones. Ratnagiri is a less urbanized district of the Maharashtra State where only few amount of population resides in urban areas so job opportunities in rural areas are mostly reserved for agricultural activities.

The participation rate of women on agriculture is governed by the economic condition of their family. Poor women are bound to accept any type of economic work to assist their family income even under very inferior conditions. The supply of women labor therefore is not a function of marginal wage rates but is determined negatively related to their economic condition.

With the development of Maharashtra in economy the status of women has gone to a higher level during the last three or four decades and it would not be out of place to mention that the rate is faster than that of men. The agricultural workers in Ratnagiri district are mostly come from socially and economically backward classes.

Age is another important factor which determines the physical as well as mental capacities of women to engage themselves in an occupation. The quantum and strength of work force is determined by age structure of population which influences

the economic and social interactions, social attitudes and occupational mobility. Agriculture is an occupation which provides more opportunities of jobs to women even to girls and old women.

Women's participation in agriculture is also affected by male migration from rural to urban areas. The rural areas of hilly district are richest in the proportion of female population because a good number of males are forced to leave their villages for the sake of livelihood and thus they migrate to nearest urban centre and even to the plains for better employment and facilities. The women and children like in their villages and thus, women in rural areas are mostly workers and are engaged mainly in agricultural activities. This trend is common in Ratnagiri district.

Conclusion:

Ratnagiri district is predominantly agricultural and the majority of its population depends on agricultural and allied activities for their sustenance. Most of its population lies in rural area. Hence large amount of population engaged in agricultural occupation. There are large numbers of women cultivator in the region since adult male workers migrate to nearby urban centers for jobs. On the whole occupational distribution pattern of population symbolizes the true character of an under developed agrarian society. Job opportunities are not increasing in proportion of the population size the number of dependents are being added more rapidly than the production of necessary goods and services which affect adversely to pre capital income and living standards of people.

Suggestions:

1. The first and foremost suggestion is that training should be given to female cultivators for processing of agricultural produce. This will lead the value addition of finished products. Further, this type of values addition will increase the income of the cultivators in 3 to 4 times income.
2. To provide rapid pace to development in the region, there is a necessity of the development plants which must be formulated in such a way that, these may provide greater employment to local adult males. Who migrate to other areas for the sake of jobs.
3. Entrepreneurial role should be assigned to women cultivators to promote agriprenuership. because the decision regarding investment, technology, commercial cropping pattern etc. are not taken at their own by women and mostly they depend on men who are not actually working in the field.
4. There is a Necessity of NGO's can undertake watershed development projects, health services, technology transfer, educating and training farmers etc.
5. The social and religious taboos against choice of an occupation are still strong especially in rural areas of the district, which must be eliminated in one way or the other.
6. There is a greater necessity of provision of education for improvement of mass literary, especially among women of the district. It enables women members to participate in secondary and tertiary services.
7. Development of village industries is needed which will be helpful for empowerment or improvement of social economic condition of the female workers.
8. Agricultural Development Programmes must be initiated and strengthened in the region.

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