



ROLE OF WOMEN IN AGRICULTURE : A CASE STUDY ON KATHUA DISTRICT

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Abstract

Women's participation in agriculture and allied activities is crucial for sustainable development, particularly in rural areas. However, despite their significant contribution, the role of women in agriculture has not been adequately recognized. A study conducted in Kathua district of J&K state aimed to analyze the work performed by women and the factors associated with their involvement in agriculture. The study found that women in Kathua district play a significant role in various agricultural activities, including sowing, weeding, harvesting, and processing of crops, as well as animal husbandry, dairying, and poultry farming. Women in Kathua district face numerous obstacles that hinder their growth and participation in the agriculture sector. Recognizing and addressing these obstacles is crucial to empowering women in Kathua district to participate fully and effectively in the agriculture sector. This can lead to increased productivity and income, improved food security and nutrition, and more sustainable rural development.

Keywords:- Women , Agriculture , Rural area , kathua district, Gender inequality , Obstacles , etc.

Introduction:

Agriculture is a vital sector for the Indian economy, contributing significantly to the country's GDP and providing employment opportunities for a large portion of the population. India is one of the world's leading agricultural nations, with a vast area of farmland that is used for crop cultivation and animal husbandry. According to the World Bank data from 2021, agriculture accounted for 8.7% of India's GDP, making it an essential sector for the country's economic growth. Additionally, India's agricultural sector is the second largest in the world. With an estimated 180 million hectares of farmland

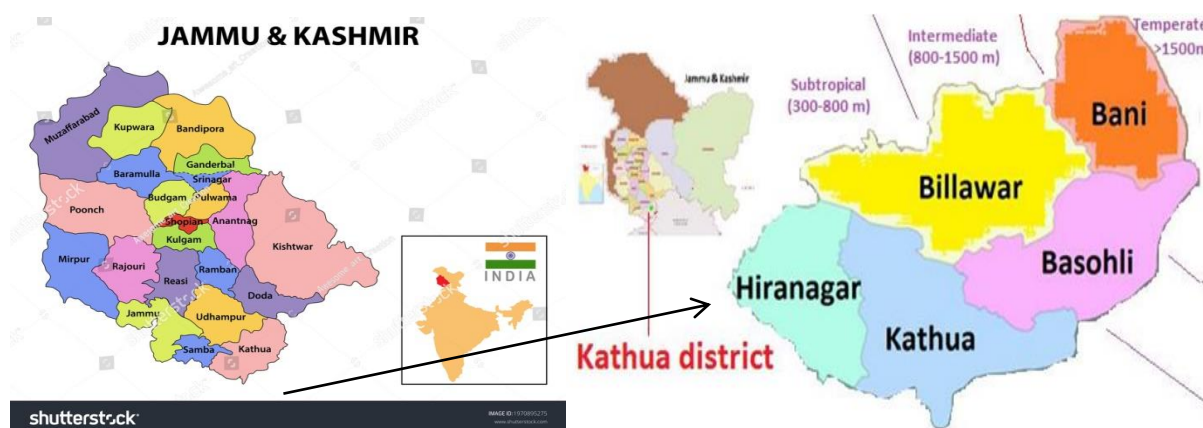
available, India has vast potential for agriculture. Out of this, 140 million hectares are currently being used for continuous cultivation of crops. This provides a significant opportunity for farmers and agricultural businesses to boost their productivity and contribute to the country's overall.

Rural women in India play a vital role in the agricultural sector and are the backbone of the rural economy. They are actively involved in various agricultural activities such as agriculture labour , animal husbandry, dairying, and farm land holding, which are predominantly female activities. In addition to agriculture, rural

women also perform various household duties, attend to farm labour, and participate in rural artisanal and handicraft activities. The importance of rural women's contribution to the economy is evident in the fact that they constitute the majority of the workforce in the dairying and animal husbandry sector. It is essential to recognize their role in decision-making processes in different agricultural activities, as their input and decision-making can lead to more efficient and productive outcomes. Moreover, rural women in India face several challenges in their daily lives, such as gender inequality, lack of access to education and healthcare, and limited economic opportunities. Empowering rural women by providing access to education, healthcare, and financial resources can help improve their economic and social status, and ultimately, lead to sustainable development in rural areas. Overall, rural women in India are a crucial workforce in the agricultural sector, and their contribution needs to be acknowledged and supported through policies and programs that address their specific needs and challenges.

Kathua is a district located in the Indian state of Jammu and Kashmir. Like many other regions in India, agriculture is one of the primary economic activities in Kathua. The role of women in agriculture in Kathua is significant and multifaceted. Women in Kathua are actively involved in various agricultural activities such as

sowing, weeding, harvesting, and processing of crops. They also play a crucial role in animal husbandry, dairying, and other related activities. Women in Kathua are responsible for taking care of domestic animals, including cows, buffaloes, goats, and sheep, and are actively involved in milk production. In addition to their active participation in farming activities, women in Kathua also contribute to agricultural decision-making processes. They provide valuable inputs and ideas for improving crop yields, increasing farm productivity, and adopting new farming technologies. However, despite their significant contribution to agriculture, women in Kathua face several challenges, such as lack of access to land, credit, and inputs, and limited participation in decision-making processes. Women in Kathua also suffer from gender inequality, lack of education, and poor health facilities. To address these challenges, various initiatives have been taken by the government and NGOs to empower women in Kathua. These initiatives aim to provide women with access to education, training, and financial resources, and create opportunities for them to participate in decision-making processes. For instance, some organizations provide women with training on new farming techniques, provide them with access to credit, and help them form self-help groups to enhance their social and economic status.



OBJECTIVES :-

- 1) To find out the role of women in agriculture and its allied fields in Kathua district .
- 2) To study the main challenges faced by female farmers in agriculture sectors.

RESEARCH METHODOLOGY:-

The data for the study has been collected from secondary sources. For the secondary data articles, census, reports, journals and internet on the subject being consulted. The study has been conducted in Kathua district. From Kathua district, four blocks are selected i.e. Hiranagar, Marheen, Barnoti, and Billawar because it had greater involvement of women in agriculture at present. From the four blocks, two villages from each block were selected purposively.

(1) ROLE OF WOMEN IN AGRICULTURE AND ALLIED FIELD IN KATHUA DISTRICT :-

Kathua district accounts for 65.50% of the total geographical area. Out of the net sown area, which comprises 23.04% of the total area, food crops occupy the largest portion, amounting to 89.20%. Wheat is the leading crop, followed by rice and other food grains, while sugarcane is the primary cash crop. Non-food crops such as fruits, vegetables, oilseeds, and fodder also occupy a significant place in the cropping pattern of the district. It is noteworthy that the cropping pattern is typical, with a predominant focus on food crops, and wheat being the main rabi crop, grown from October to June throughout the region. Rice, on the other hand, is a kharif crop mostly grown in irrigated areas. Sugarcane is cultivated mainly in guaranteed irrigated areas, while non-food crops like fruits, vegetables, oilseeds, and fodder occupy a prominent place in the region.

Kathua district is indeed divided into 19 blocks, namely Bani, Basohli, Baggan, Kathua, Billawar, Hiranagar, Nagri, Barnoti, Marheen, Dinga Amb,

Duggain, Duggan, Lohai-Malhar Mahanpur, Mandli, Nagrota Gujroo, Bhoond, Dhar Mahanpur, and Keerian Kandyal. The district is also home to approximately 512 villages. Each block in Kathua district has its unique characteristics, with varying topography, soil, and climate conditions. This diversity provides opportunities for a range of agricultural activities and crops that are suitable for specific areas. Moreover, the district's extensive rural areas offer significant scope for promoting agriculture and allied sectors, which can generate employment and income opportunities for the rural population.

(1.1) Women in agriculture sector :-

In Kathua district, women are actively involved in agriculture and allied fields. However, their participation and role in the sector vary depending on the area and type of agriculture.

In the irrigated areas, such as Hiranagar, Nagri, Marheen, Barnoti women are involved in various agricultural activities, such as land preparation, planting, weeding, harvesting, and marketing of farm products. They also play an important role in the processing and preservation of farm products. Women are engaged in both food and non-food crop production, such as wheat, rice, sugarcane, vegetables, and fruits.

In the kandi belt areas, such as Bani, Basohli, Billawar, Dinga Amb where rainfed agriculture is prevalent, women are primarily involved in livestock rearing and fodder production. They also participate in the collection and sale of minor forest produce, such as mushrooms, berries, and medicinal herbs.

Despite their significant contributions to agriculture and allied fields, women in Kathua district face several challenges. These include limited access to productive resources, such as land, credit, and technology, lack of education and training opportunities, and cultural and social norms that limit their mobility and decision-making power.

Table 1 :- Different Agricultural activities

Activities	Frequency	%age	Mean	Rank
Traditional care of the field	150	93.75	0.937	3
Irrigation	29	18.12	0.1812	9
Ploughing	3	1.87	0.08	11
Manuring of field	34	21.24	0.6125	7
Sowing of seeds	75	46.86	0.60625	8
Weeding	138	86.25	0.8625	5
Harvesting	137	85.62	0.90625	4
Threshing	104	65	0.65625	6
Winnowing	160	100	1	1
Storage of green fodder	156	97.5	0.975	2
Marketing	5	3.12	0.1	10

(1.2) Women in Dairy Sector :-

In Kathua district, as in many rural areas, women play a significant role in the dairy sector. They are primarily responsible for livestock management and milk processing. On average, women devote 3.5 hours per day to animal husbandry activities, including milking, cleaning the sheds, and preparing animal feed, compared to men's 1.6 hours per day.

The women in Kathua district are also involved in the collection of farmyard manure and preparing cooking fuel using dung cakes. Additionally, they possess significant knowledge of animal behavior and rearing procedures, which is crucial in enhancing milk production.

However, women in Kathua district face several challenges in the dairy sector, such as limited access to training, resources, and technology, which hinders their ability to enhance their skills and knowledge. Furthermore, they often face social and cultural barriers that restrict their participation in decision-making processes and access to markets.

To overcome these challenges, it is essential to provide women in Kathua district with access to resources, training, and technology, along with the necessary support to enhance their skills and

knowledge. Additionally, creating an enabling environment that recognizes women's contribution and encourages their participation in decision-making processes can go a long way in empowering women in the dairy sector in Kathua district.

(1.3) Women in Poultry Farming:-

Women in Kathua district are also involved in poultry farming, a sector that has significant potential for employment and income generation. Women's involvement in poultry farming is primarily in backyard poultry, where they rear local breeds of chicken for egg and meat production.

Women in Kathua district are responsible for managing poultry flocks, including feeding, watering, and providing shelter. They also collect eggs, hatch and rear chicks, and sell them in the local market. Women's involvement in poultry farming contributes to their income and provides a source of nutritious food for their families. However, women in poultry farming in Kathua district face several challenges, such as limited access to training, veterinary services, and finance. They also face issues of low productivity, lack of market access, and inadequate infrastructure.

To address these challenges, it is crucial to provide women with access to training on poultry management, disease control, and nutrition. Additionally, improving access to veterinary services, credit, and marketing support can go a long way in enhancing women's participation in the poultry sector.

Moreover, creating an enabling environment that recognizes women's contribution and empowers them to participate in decision-making processes can help women in the poultry sector in Kathua district to overcome these challenges and improve their livelihoods.

Women’s Contribution to agriculture production in kathua district

Table 2

**Extent of respondent’s involvement in Farm Decisions:
Measures to Increase Production**

Decision	Extent of Involvement	Frequency	%age
Level of crop Production	Fully independent	6	4%
	Partial	56	37.3%
	Involvement	88	58.6%
	Nil		
Cropping pattern To be followed	Fully independent	4	2.6%
	Partial	76	50.6%
	Involvement	70	46.6%
	Nil		
Method to be Used for sowning	Fully independent	7	4.6%
	Partial	67	44.6%
	Involvement	76	50.6%
	Nil		
Using plant Protection Measures	Fully independent	2	1.3%
	Partial	34	22.6%
	Involvement	114	76%
	Nil		
Types of Fertilizers to be Used	Fully independent	2	1.3%
	Partial	37	24.6%
	Involvement	111	74%
	Nil		
Installation of Hand pump	Fully independent	8	5.3%
	Partial	59	39.3%
	Involvement	83	55.3%
	Nil		
Installation of Tube well	Fully independent	8	5.3%
	Partial	59	39.3%
	Involvement	83	55.3%
	Nil		
New implements to Be used for Production	Fully independent	23	15.3%
	Partial	69	46%
	Involvement	58	38.6%
	Nil		

In this table 2 highlights the crucial role that women play in agricultural production and decision making, particularly in the context of Kathua. Women are found to be actively involved in decisions related to the storage of animal fodder and to a certain extent, storage of farm produce. It is encouraging to see that 95.3% of respondents were involved in decisions related to storing animal fodder.

However, it is concerning that women's involvement in other activities related to production and harvesting is almost non-existent, except for a small percentage of women who were involved in the decision related to the selection of new implements to be used for production. This suggests

that women may be excluded from important decision making related to agricultural practices and may not have equal access to resources and technologies as men.

It is essential to recognize and promote the important role of women in agricultural production and decision making. This can be done by providing women with equal access to resources and technologies, ensuring their participation in decision-making processes, and addressing cultural and societal norms that limit their participation. By empowering women in agriculture, we can promote sustainable development and gender equality in rural communities like Kathua.

Table 3
Extent of respondent’s involvement in Decision Related to Expenditure on farm

Decision	Extent of Involvement	Frequency	% age
Money to be spent on Purchases of machines	Fully independent	-	-
	Partial involvement	6	4%
	Nil	143	95.3%
Money to be spent on Purchase of implements	Fully independent	-	-
	Partial involvement	14	9.3%
	Nil	136	90.6%
Money to be spent on Purchase of seeds	Fully independent	3	2%
	Partial involvement	41	27.3%
	Nil	106	70.5%
Paying wages to labourers	Fully independent	2	1.3%
	Partial involvement	53	35.4%
	Nil	95	63.3%

In table 3 highlights a concerning lack of women's involvement in important decision making related to agricultural production in Kathua. The data indicates that major decisions related to the amount of money to be spent on purchasing machines and small agricultural implements were completely absent. Similarly, only a very small percentage of women were fully involved in major decision making related to the purchase of seeds, and only 2% of women heads of the family independently make decisions about this.

Moreover, decisions related to wages to be paid to laborers were taken independently by only 1.3% of respondents, while 35.3% of respondents took the decisions partially. This indicates that women may be excluded from decision making related to labor, which can have a significant impact on the overall success of agricultural production.

It is crucial to address these gender disparities in decision making related to agriculture. This can be achieved through initiatives that promote gender equality and empower women to actively

participate in decision-making processes related to agricultural production. By providing women with equal access to resources, technologies, and information, we can help them make informed decisions that promote sustainable and equitable development in rural communities like Kathua.

Working hours of women in agriculture in Kathua district

The working hours for women in agriculture in Kathua district vary depending on the season and the specific task they are engaged in. During the sowing season, women work in the fields from early morning until late evening, often working for more than 10 hours a day. They take breaks in between and work together in groups, helping each other in various activities like sowing, planting, and weeding.

During the harvesting season, women again work for long hours to ensure timely and efficient harvesting. They start early in the morning and continue working until late evening, often working for more than 12 hours a day. Women in Kathua district are involved in various activities during the harvesting season, like cutting crops, threshing, winnowing, and packing.

Apart from fieldwork, women in Kathua district are also involved in various other agricultural activities like animal husbandry, dairy farming, and beekeeping. The working hours for these activities vary depending on the specific task and the season.

It is worth noting that working conditions for women in agriculture in Kathua district can be challenging, and they often face gender-based discrimination and lack access to resources like land, credit, and information. However, there are various initiatives by the government and non-governmental organizations to empower women in agriculture and improve their working conditions.

There are various government schemes and initiatives aimed at promoting women's participation in agriculture and enhancing their skills and productivity. For example, the Mahila Kisan Sashaktikaran Pariyojana (MKSP) is a central government scheme that aims to empower women in agriculture by providing them with training, skill development, and financial assistance.

In addition, there are also several non-governmental organizations (NGOs) working in the district to support women farmers. Some of these NGOs include the Jammu and Kashmir Rural Reconstruction and Development Programme (JKRRDP), the Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu (SKUAST-J), and the Jammu and Kashmir State Rural Livelihoods Mission (JKSRLM).

(2) Main problem in women growth in agriculture sector in Kathua district :-

There are several obstacles that hinder the growth and participation of women in the agriculture sector in Kathua district. Some of the main obstacles include:

1) **Social and cultural barriers:** Women in Kathua district face social and cultural barriers that limit their mobility and access to resources, including land, credit, and technology. Patriarchal attitudes and gender-based discrimination can also limit women's decision-making power and their ability to participate in community activities.

2) **Lack of access to resources and inputs:** Women farmers in the district often lack access to essential resources such as quality seeds, fertilizers, and irrigation facilities. They also face challenges in accessing credit and financial resources, which limits their ability to invest in their farms and increase productivity.

3) **Limited knowledge and technical skills:** Women in agriculture often lack technical skills and knowledge of modern

farming techniques and technologies. This limits their ability to adopt new practices and technologies that could increase their yields and profitability.

4) **Limited market access:** Women farmers in Kathua district often lack access to markets where they can sell their produce at fair prices. This limits their ability to earn a decent income from their farming activities and discourages them from investing in their farms.

5) **Climate change:** Climate change is affecting agriculture in the district, and women farmers are particularly vulnerable to its impacts. Erratic rainfall patterns, prolonged droughts, and increased temperatures can affect crop yields and livestock production, which can disproportionately impact women farmers who often have limited resources to adapt to these changes.

6) **Lack of access to land:** Women in Kathua district often face difficulties in accessing land due to patriarchal norms and traditions that favor men. Without land ownership or access, women farmers are unable to fully participate in agriculture and benefit from the sector's opportunities.

7) **Malnutrition:** Malnutrition is a significant issue in many parts of India, including Kathua district. As you mentioned, many women in the district suffer from anemia and are below their desirable weight, which can have serious health implications. Malnutrition in women can be a significant obstacle in the agriculture sector. When women suffer from malnutrition, their physical and mental capacity is reduced, which can limit their ability to engage in agricultural activities and achieve optimal yields. Malnutrition can also impact women's health and well-being, leading to increased vulnerability to illness and disease. Furthermore, women's malnutrition can have intergenerational effects, as undernourished mothers are more likely to give birth to undernourished children, perpetuating a cycle of malnutrition and poverty. This can lead to a loss of

productivity in the agricultural sector, as well as negatively impact the wider community and economy. To address malnutrition in women in the agriculture sector, it is essential to promote access to diverse and nutritious foods, particularly for women farmers and farmworkers. This can include initiatives such as providing training on nutrition-sensitive agriculture practices, promoting home-based food production and kitchen gardens, and improving access to healthcare and support services. Additionally, it is important to address the underlying socio-economic factors that contribute to malnutrition, such as poverty, gender inequality, and limited access to resources and services.

8) **Gender inequality :** Gender inequality is a significant issue in the agriculture sector in Kathua, with women facing a range of barriers to their full participation and empowerment. These barriers can include limited access to productive resources such as land, credit, and inputs, as well as discrimination and stereotypes that limit their opportunities for education, training, and leadership. To address gender inequality in the agriculture sector in Kathua, it is important to promote policies and programs that support women's empowerment and gender equality. This can include initiatives such as improving women's access to land and other productive resources, providing training and education opportunities that target women and girls, and promoting gender-sensitive agricultural extension services. Additionally, it is important to address the gender-based discrimination and stereotypes that limit women's opportunities and promote women's leadership and participation in decision-making processes and agricultural organizations. By promoting gender equality in the agriculture sector, not only can women's empowerment be advanced, but the sector as a whole can benefit from the increased participation and contributions of women. This can lead to

increased productivity, food security, and sustainable agriculture practices in Kathua.

9) **Pregnancy** : Pregnancy is a significant issue for women in the agriculture sector in Kathua district. Pregnant women working in agriculture face a range of challenges related to their health, safety, and productivity. These challenges can include exposure to pesticides and other harmful chemicals, physically demanding work that can lead to fatigue and injury, limited access to healthcare and maternal services, and inadequate maternity leave and other support for new mothers. To address these challenges, it is important to promote policies and programs that support the health and well-being of pregnant women working in agriculture. This can include initiatives such as promoting the use of safe and environmentally-friendly agricultural practices, providing training and education on safe working practices during pregnancy, improving access to maternal healthcare and services, and promoting policies that provide adequate maternity leave and support for new mothers. Additionally, it is important to raise awareness about the unique challenges faced by pregnant women in agriculture and to promote their inclusion in decision-making processes and agricultural organizations.

By addressing the challenges faced by pregnant women in agriculture, the sector can become more inclusive and sustainable, benefiting both men and women in Kathua district.

LITERATURE REVIEW:-

Literature review has been divided on the following two themes:-

- **On the basis of role of women in agriculture and its allied fields in Kathua district .**

DR.GAUTAM P. KANANI(2020) women play a crucial role in agriculture and allied activities in India, accounting for around 70% of farm work. However, they often face significant obstacles,

including limited access to productive resources, recognition, and support. This inequality restricts their potential to enhance productivity and reduce poverty in the agriculture sector. Therefore, there is a need to address these challenges and promote gender equality in agriculture, including initiatives that improve access to land, credit, technology, and markets for women farmers. This would not only benefit women but also contribute to the overall growth and development of the agriculture sector, and ultimately, the economy as a whole.

Preeti Devi(2020) Based on the study conducted in Kathua district of J&K state, it can be concluded that women play a significant role in agriculture and allied fields. However, their contribution is often not recognized or valued. Economic and non-economic factors influence women's participation in agriculture, and their involvement is hindered by various obstacles such as lack of access to productive resources, gender discrimination, and social and cultural norms. The study found that most women in the study area had a medium extent of participation in agriculture, and their age was positively related to the extent of participation. On the other hand, the education level of women was negatively correlated with their extent of participation, indicating that higher education levels may not necessarily lead to greater participation in agriculture. Therefore, it is important to address the obstacles faced by women in agriculture and provide them with equal opportunities and resources to contribute to the growth and development of the agricultural sector.

Subita Sharma , P K Rao and Rajni Sharma(2013) It is indeed true that women are a significant contributor to the Indian economy, particularly in the agriculture sector. The study conducted in Jammu District is essential in highlighting the extent of women's involvement in decision-making related to farming and income-generating activities. The findings

of the study, which analyzed the involvement of 200 farm women from three different villages, in terms of fully independent, partial involvement, and no involvement, provide important insights.

Prof. Jayasheela (2015) Agriculture is a crucial sector in India, with 70% of the population involved in this occupation. The impact of greater integration through agriculture on women is an important area of study, as it can have significant implications for their economic empowerment and well-being. agriculture does create many jobs for women in the sector, which can provide them with greater control over household resources and lead to higher earnings for the family. However, despite the increasing employment of women in agriculture, gender wage gaps persist in India.

• **On the basis of the main challenges faced by female farmers in agriculture sectors .**

Dr. Mange Ram(2015) women's participation in agriculture is crucial and significant, especially in developing countries like India. However, despite their important role, women face several obstacles in the agriculture sector, such as lack of access to productive resources, gender discrimination, sexual harassment, malnutrition, and limited access to education and health services. Addressing these obstacles and promoting gender equality in agriculture is essential for achieving sustainable agricultural development and empowering women in rural areas. It is imperative to recognize and acknowledge the contributions of women in agriculture and provide them with the necessary support and opportunities to enhance their productivity and economic independence.

Hemla Aggarwal , Subita Sharma(2013) The study conducted in Jammu district highlights the active engagement of women in various farm activities, including plowing, cleaning and leveling of fields, raising nurseries, sowing seeds, and applying fertilizers and pesticides.

However, the study also found that a significant number of women faced various challenges such as minor health problems, management issues, and social and financial constraints. These challenges can limit their ability to participate fully in agricultural activities and hinder their economic empowerment. To address these challenges and promote the economic empowerment of rural women in agriculture, it is essential to develop policies and programs that address their specific needs and constraints.

CONCLUSION :-

Rural women play a crucial role as major stakeholders in the growth of the agricultural sector in Kathua, and their contributions should be acknowledged and mainstreamed for sustainable development. Ensuring access to resources, technology, education, health facilities, ownership rights, and skill development are important steps that can be taken to empower rural women and enable them to contribute effectively to the agricultural sector. This will not only improve the livelihoods of rural women but also contribute to the overall economic development of the region.

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