

Gender Roles in Agroforestry Systems of Ayodhya district, Uttar Pradesh

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Abstract: This study was conducted in all the eleven blocks of Ayodhya district of Uttar Pradesh for a period of two years using questionnaire surveys to study the gender roles in agroforestry systems and tree management, preferences of tree species, access to resources and participation in decision-making, gendered rights to harvesting and processing of agroforestry tree products, marketing of products, spaces and ownership of trees and identified the factors hindering gender adoption of agroforestry and evaluated its implications for agroforestry interventions. The males were involved in majority of the agroforestry activities such as ploughing, tree planting, fertilization, pruning, harvesting, transport and sales. Males had greater access to land ownership, land transfer rights, loan and irrigation facilities. The decision on planting of species, which area to plant, how many numbers of plants to be planted, irrigation, pruning, harvesting and sale was mostly taken by males whereas the females took decision on the season of planting, financial management, fertilizer application and processing. Males enjoyed the rights of harvesting, marketing and tree ownership and the females had the right of processing agroforestry products. Females preferred fruit bearing trees whereas the men preferred timber-yielding trees. Family opposition and limited cash availability was seen as a hindrance by the females in adoption of agroforestry systems and they stressed on policy interventions to improve the adoption rate of agroforestry systems. The societal pressure restricts the females from becoming financial independent and decision makers. High level policy intervention and changes in social behaviour and attitudes is required to cherish the dream of women empowerment in this region.

Keywords: Agroforestry adoption, Decision-making, Gendered-rights, Implications, Tree preferences

Over the years the attention paid by scientific community to gender and its role in development and inequalities between men and women has increased (Kiptot et al 2014). If these gender imbalances are addressed, it will increase food security and prosperity. Gender inequalities are determined by the factors such as social norms, institutional rules, gendered division of labour, gendered knowledge systems, gendered differences in access to natural, physical, financial and human capital and gendered differences in decisionmaking processes (Empacher et al 2001, Ott 2002). Social norms shape the gender decisions and choice. Women are always looked upon as weaker section of the society as compared to their male counterparts. To address the gender imbalances prevalent in the society, it is important to understand the social relations between men and women. Gender roles are defined as the socially accepted tasks and responsibilities that are assigned to men and women (Manfre and Rubin 2012). These gender roles may change with time, within households and caste. Traditionally, women play a lesser role than men in the decision-making process that affect and control their own lives and those of their homesteads and entitlements. Gender division of labor is itself rooted in religious and other cultural belief systems in

which concepts of masculinity and femininity, and norms about behavior that is appropriate for each sex, are intrinsic. So, depending on their roles and responsibilities, the choices and preferences of men and women differ with respect to tree species and agroforestry system choices.

Gender participation in agroforestry, varies according to preferences and values of tree species and products, as well as to the level of complexity of practices (Ratnapuri 2011). In Africa, women's participation is low in agroforestry enterprises that are considered men's domains such as timber and high in enterprises that have little or no commercial value, such as collection of indigenous fruits and vegetables; and women are often confined to the lower end of the value chain of agroforestry products (retailing), which limits their control over and returns from the productive process (Kiptot and Franzel 2012). For women's income, agroforestry value chains are particularly important, but low access to capital, technology and information, constrain women from developing their enterprises further. Furthermore, tree species preferences in agroforestry also vary between male and female household members. The study in Pakistan highlighted that men were keen on *Eucalyptus* species, as it had better survival rates, whereas women preferred *Dalbergia sissoo, Melia azedarach* and *Morus alba,* which could provide better income (Muhammad 2003).

As gender roles are dynamic and depend upon time, circumstances demand and requirements, it is important to understand the complexity of gender roles and social norms. If this is not understood, it will not be possible to improve agroforestry research and development. Once this gap is filled there will be better information on constraints faced by gender in adoption of agroforestry systems, value addition of products which can then be taken up for further research and development. This paper studied the gender-wise roles, preferences, rights, participation in decision-making and factors hindering adoption of agroforestry systems.

MATERIAL AND METHODS

Study site: This study was conducted in the Ayodhya district of Uttar Pradesh which consists of five tehsils and eleven blocks. This district lies between 26.7730 °N and 82.1458 °E. This district is situated 93 m above MSL (Mean Sea Level). The climate of the district is tropical monsoon. The average temperature varies from 32 °C in summers to 16 °C in winters and the average annual rainfall is 1067 mm. The study area includes reserve forests, remnant vegetation patches, rivers, temple ponds, wetlands, gardens, agroforestry systems, paddy fields and human habitations.

Method: Questionnaire surveys were conducted for two years (2021 to 2023) to understand gender roles, decisionmaking, constraints and interventions required in agroforestry systems practiced in Ayodhya district of Uttar Pradesh which consists of eleven blocks. From each block, 10 villages were identified and from each village 10 households were selected. In totality, 1100 households in 11 blocks were surveyed in which 77 households were found to have five agroforestry systems namely agri-silviculture system, agri-horticulture system, silvipastoral system and aquasilviculture system. Questions related to gender roles in agroforestry systems and tree management, gendered preferences on tree species, access to resources and participation in decision-making, gendered rights to harvesting and processing of agroforestry tree products, marketing of products, spaces and ownership of trees, factors hindering gender adoption of agroforestry and its implications for agroforestry interventions were considered. To find out the most preferred tree species as per house owner's opinion, Ahire and Kumar (2006) method was followed. The owners were asked to give a score (from 1-10) to each tree species that the owner's listed as preferred species. The most preferred species was given the highest score and the rest of the tree species were given the scores in descending order of preferences. The tree species having the highest score was given 1st rank and so on in ascending order. Chi-square test was used for analyses using SPSS (version 19.0).

RESULTS AND DISCUSSION

Gender roles in agroforestry systems and tree management: Nine major farming activities were in Ayodhya district namely ploughing, pit digging, tree planting, fertilization, watering, pruning, harvesting, transport and sale (Table 1). In all the eleven blocks, ploughing, tree planting, fertilization, pruning, harvesting, transport, sales activity was performed mainly by males and the least by females (Table 1). Across all the blocks, there was no statistically significant difference for ploughing, tree planting, pruning and harvesting and there was statistically significant difference for fertilization application. According to the studies conducted by other researchers males had major responsibility in ploughing and transportation activities (Catacutan and Naz 2015), tree planting activity (Phiri et al 2004), fertilization and sale activities (Birhanu and Guye 2022), which is similar to present study but dissimilar to the study conducted by Birhanu and Guye (2022) wherein 92.5% of males in four Southern Ethiopia villages were involved in pruning. Across all the blocks, the pit digging and irrigation activity was performed by both genders, and least by males. There was no statistically significant difference across the blocks for pit digging and irrigation activity. Birhanu and Guye (2022) observed that males shared the major responsibility in irrigation activity. The females preferred species such as Azadirachta indica, Prosopis cineraria, Tectona grandis, Psidium guajava, Dalbergia sissoo and Mangifera indica whereas the males preferred species such as Eucalyptus globulus, Madhuca indica, Mangifera indica and Azadirachta indica (Table 2).

Gender-wise access to resources: There was access to eight major farming resources in Ayodhya district namely land ownership, transfer rights, loans, trainings, seeds, irrigation facilities, market and harvest (Table 3). The males had the highest access to land ownership followed by females and both genders and there was no statistically significant difference across the blocks for land ownership. In all the eleven blocks, the highest access to land transfer rights, loan and irrigation facilities was enjoyed by males, and least by females. There was statistically significant difference across the blocks for access to land transfer rights and irrigation facilities but access to loan was not statistically significantly different across the blocks. Catacutan and Naz (2015) in Vietnam, observed that males had higher access to loans as compared to females which is similar to present

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Table 1. G	Sender ro	les in agrofo	restry and	tree mana	gement of sel∈	scted agrofc	orestry syste	ems in Ayodi	hya district,	Uttar Prade	sh.			
Activities	Gender	Overall (n=77) (%)	Milkipur (n=12) (%)	Sohawal (n=6) (%)	Harringtonganj (n=7) (%)	Mawai (n=4) (%)	Rudauli (n=7) (%)	Mayabazar (n=6) (%)	Bikapur (n=7) (%)	Masodha (n=3) (%)	Purabazar (n=8) (%)	Amaniganj (n=8) (%)	Tarun (n=9) (%)	p-value
Ploughing	Male	79.22	100.00	66.67	85.7	75.00	71.43	83.33	100.00	66.67	62.50	75.00	66.67	0.66
	Female	2.60	0.00	16.67	0.0	0.00	0.00	0.00	0.00	0.00	00.00	0.00	11.11	
	Both	18.18	0.00	16.67	14.3	25.00	28.57	16.67	00.0	33.33	37.50	25.00	22.22	
Pit digging	Male	22.08	33.33	33.33	42.9	50.00	71.43	50.00	100.00	66.67	62.50	62.50	66.67	0.39
	Female	33.77	33.33	16.67	0.0	25.00	00.0	16.67	00.0	00.0	00.0	00.0	11.11	
	Both	44.16	33.33	50.00	57.1	25.00	28.57	33.33	00.0	33.33	37.50	37.50	22.22	
Tree	Male	57.14	50.00	50.00	28.6	25.00	0.00	16.67	14.29	33.33	0.00	0.00	22.22	0.59
planting	Female	10.39	8.33	16.67	28.6	25.00	42.86	50.00	42.86	33.33	50.00	50.00	33.33	
	Both	32.47	41.67	33.33	42.9	50.00	57 14	33.33	42.86	33.33	50.00	50.00	44.44	
Fertilizatior	n Male	45.45	75.00	33.33	57.1	50.00	71.43	50.00	100.00	33.33	00.0	00.0	22.22	0.02
	Female	20.78	8.33	16.67	0.0	25.00	00.0	16.67	0.00	33.33	50.00	50.00	33.33	
	Both	33.77	16.67	50.00	42.9	25.00	28.57	33.33	0.00	33.33	50.00	50.00	44 44	
Irrigation	Male	25.97	16.67	16.67	28.6	00.0	28.57	16.67	28.57	33.33	37.50	37.50	33.33	0.99
	Female	35.06	41.67	33.33	28.6	50.00	28.57	33.33	28.57	33.33	37.50	37.50	33.33	
	Both	38.96	41.67	50.00	42.9	50.00	42.86	50.00	42.86	33.33	25.00	25.00	33.33	
Pruning	Male	77.92	75.00	66.67	85.7	75.00	71.43	66.67	71.43	66.67	87.50	87.50	88.89	0.96
	Female	5.19	8.33	16.67	0.0	0.00	0.00	16.67	0.00	0.00	0.00	0.00	11.11	
	Both	16.88	16.67	16.67	14.3	25.00	28.57	16.67	28.57	33.33	12.50	12.50	0.00	
Harvesting	Male	76.62	83.33	66.67	57.1	75.00	85.71	66.67	85.71	100.00	87.50	75.00	66.67	0.93
	Female	2.60	00.00	00'0	14.3	00.00	00.00	00.00	00.0	00'0	0.00	00'0	11.11	
	Both	20.78	16.67	33.33	28.6	25.00	14.29	33.33	14.29	00.0	12.50	25.00	22.22	
Transport	Male	97.40	100.00	83.33	100.0	100.00	100.00	83.33	100.00	100.00	100.00	100.00	100.00	
	Female	00.00	0.00	00.00	0.0	00.00	0.00	00.00	0.00	00.0	0.00	00.00	0.00	
	Both	2.60	0.00	16.67	0.0	00.00	0.00	16.67	00.00	0.00	0.00	00.00	0.00	
Sale	Male	77.92	75.00	66.67	71.4	50.00	85.71	66.67	71.43	100.00	87.50	100.00	77.78	
	Female	0.00	0.00	00.00	0.0	00.00	0.00	00.00	00.00	0.00	0.00	00.00	0.00	
	Both	22.08	25.00	33.33	28.6	50.00	14.29	33.33	28.57	0.00	12.50	0.00	22.22	
The level of s	significance	is (p < 0.05)												

Gender Roles in Agroforestry Systems

study. In all the blocks, both the genders had the highest access to training, seeds, market, and least by females. There was statistically significant difference across the blocks for access to training, seeds and access to market. In earlier observations females had higher access to seeds (Catacutan and Naz 2015) and market (Birhanu and Guye 2022) whereas in the present study, both the genders had higher access to seeds as well as market. Across all the blocks, access to harvest was highest by both gender and least by males. There was no statistically significant difference across the blocks for access to harvest. Birhanu and Guye (2022) observed that females had higher access to harvest.

Gender-wise participation in decision-making, harvesting and processing of agroforestry tree products: Across all the eleven blocks, the decision on planting of species, numbers of plants to be planted, irrigation, pruning, harvesting and sale was mostly taken by males and least by both gender (Table 4). There was no statistically significant difference across the blocks for decision related to planting of species, numbers of plants to be planted, irrigation, pruning and sale whereas there was statistically significant difference across the blocks for decision making on harvesting. Birhanu and Guye (2022) observed that decision on planting of species was taken by females which contradicted the present study, where the males took decision on planting of species. Catacutan and Naz (2015) concluded that decision on numbers of plants to plant, irrigation and sale were taken by males. The decision on which area to plant there was taken mainly by males and least by females and there was no statistically significant difference across the block for the decision on the area to plant. Across all blocks, the decision on season of planting, financial management, fertilizer application and processing were mostly taken by females and least by both the genders. There was no statistically significant difference across the blocks for decision on season of planting, financial management, fertilizer application and processing. Catacutan and Naz (2015) in Vietnam mentioned that decision on financial management are taken by males. Across all blocks, majority of the males enjoyed the rights of harvesting, marketing, tree ownership and least by both genders. There was statistically significant difference across the blocks for rights to harvesting but this was not the case for rights to market and tree ownership. Across all the blocks, the right of processing was mostly enjoyed by females and least by both gender and there was no statistically significant difference across the blocks.

Factors hindering gender adoption of agroforestry and its implications for agroforestry interventions: The lack of transportation, limited business and negotiation skills, high initial investment and lack of extension activity was seen as a hindrance, the highest by males and least by females (Table 6). But lack of transportation, high initial investment and lack of extension activities viewed as a hinderance in agroforestry system was not statistically significantly different across the blocks. Catacutan and Naz (2015) found that high initial investment was seen as a major hindrance by males. The family opposition across all the blocks was seen as hindrance, the highest by females and least by males. Across all blocks, limited products, poor understanding of tree management, limited land availability, absence of a guiding policy on agroforestry were seen as hindrance, the highest by both gender and least by females. There was no statistically

 Table 2. Gendered ranking of species showing tree preferences in selected agroforestry systems in Ayodhya district, Uttar

 Pradesh

Name of tree	Milk	ipur	Soh	awal	Harring	gtonganj	Ма	wai	Ru	dauli	Maya	abazar	Bika	apur	Mas	odha	Pura	bazar	Ama	niganj	Tar	run
species	М	F	М	F	М	F	М	F	М	F	М	F	М	F	М	F	М	F	М	F	М	F
Eucalyptus spp.	1	10	3	10	2	4	1	3	8	10	4	2	1	6	5	7	3	8	1	10	8	10
Tectona grandis	2	5	1	3	1	5	2	8	10	3	5	1	9	5	10	4	8	1	2	5	10	3
Swietenia spp.	4	8	10	5	10	2	4	5	5	5	8	10	4	8	8	2	9	10	4	8	5	5
Ailanthus excelsa	3	6	8	4	6	8	3	2	7	4	6	7	3	4	7	6	7	6	3	6	7	2
Dalbergia sissoo	5	4	2	8	7	7	5	4	4	8	7	4	5	7	4	5	4	7	5	1	4	8
Mangifera indica	6	1	6	10	5	3	6	6	6	2	1	5	6	3	6	3	6	5	6	3	6	1
Prosopis cineraria	7	7	2	2	8	10	7	9	3	1	10	8	7	2	3	10	5	2	7	4	3	4
Madhuca indica	8	9	4	7	9	6	8	7	1	7	2	9	8	10	1	8	2	9	8	2	1	7
Azadirachta indica	9	2	5	9	4	9	9	1	2	9	9	6	2	9	2	9	1	4	9	9	2	9
Psidium gujava	10	3	7	6	3	1	10	10	9	6	3	3	10	1	9	1	10	3	10	7	9	6

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Table 3. (Gender-w	ise access to	o resource	s of farmers	s of selected a	groforestry	systems in	Ayodhya dis	itrict, Uttar F	radesh				
Activities	Gender	Overall (n=77) (%)	Milkipur (n=12) (%)	Sohawal (n=6) (%)	Harringtonganj (n=7) (%)	Mawai (n=4) (%)	Rudauli (n=7) (%)	Mayabazar (n=6) (%)	Bikapur (n=7) (%)	Masodha (n=3) (%)	Purabazar (n=8) (%)	Amaniganj (n=8) (%)	Tarun (n=9) (%)	p-value
Land	Male	71.43	83.33	66.67	57.14	100.00	85.71	50.00	85.71	33.33	50.00	75.00	77.78	0.91
ownership	Female	14.29	8.33	16.67	14.29	0.00	14.29	16.67	14.29	33.33	25.00	12.50	11.11	
	Both	14.29	8.33	16.67	28.57	0.00	00.0	33.33	00.0	33.33	25.00	12.50	11.11	
Land	Male	49.35	41.67	50.00	85.71	75.00	85.71	66.67	14.29	0.00	50.00	12.50	55.56	0.02
transter rights	Female	18.18	41.67	33.33	14.29	0.00	14.29	00.00	14.29	00.0	25.00	12.50	11.11	
)	Both	32.47	16.67	16.67	0.00	25.00	00.0	33.33	71.43	100.00	25.00	75.00	33.33	
Loans	Male	54.55	66.67	33.33	85.71	75.00	28.57	33.33	42.86	66.67	50.00	62.50	55.56	0.59
	Female	18.18	16.67	16.67	0.00	00.00	14.29	50.00	14.29	00.0	37.50	12.50	22.22	
	Both	27.27	16.67	50.00	14.29	25.00	57.14	16.67	42.86	33.33	12.50	25.00	22.22	
Trainings	Male	37.66	50.00	16.67	85.71	75.00	28.57	00.00	42.86	33.33	37.50	12.50	33.33	0.01
	Female	23.38	33.33	00.0	14.29	0.00	57.14	00.00	42.86	0.00	37.50	12.50	22.22	
	Both	38.96	16.67	83.33	0.00	25.00	14.29	100.00	14.29	66.67	25.00	75.00	44.44	
Seeds	Male	38.96	41.67	00.00	85.71	0.00	14.29	00.0	85.71	33.33	62.50	50.00	22.22	0.00
	Female	18.18	16.67	00.00	0.00	0.00	14.29	00.00	00.0	00.00	37.50	37.50	55.56	
	Both	42.86	41.67	100.00	14.29	100.00	71.43	100.00	14.29	66.67	0.00	12.50	22.22	
Irrigation	Male	48.05	58.33	16.67	0.00	25.00	28.57	50.00	71.43	33.33	62.50	87.50	55.56	0.01
racilities	Female	23.38	16.67	00.00	85.71	25.00	42.86	16.67	00.0	33.33	12.50	12.50	22.22	
	Both	28.57	25.00	83.33	14.29	50.00	28.57	33.33	28.57	33.33	25.00	0.00	22.22	
Market	Male	38.96	33.33	0.00	85.71	25.00	85.71	50.00	71.43	66.67	12.50	0.00	22.22	0.01
	Female	3.90	8.33	00.00	0.00	25.00	00'0	16.67	00.0	00.0	0.00	00.00	00.0	
	Both	57.14	58.33	100.00	14.29	50.00	14.29	33.33	28.57	33.33	87.50	100.00	77.78	
Harvest	Male	20.78	25.00	16.67	0.00	50.00	0.00	33.33	14.29	00.0	37.50	12.50	33.33	0.07
	Female	27.27	16.67	50.00	00.00	0.00	00.00	33.33	28.57	33.33	50.00	62.50	22.22	
	Both	51.95	58.33	33.33	100.00	50.00	100.00	50.00	42.86	66.67	12.50	25.00	44.44	
The level of	significance	is (p < 0.05)												

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Planting of Male 53.25 50.00 33.33 51.41 50.00 57.14 50.00 42.86 66.67 62.50 Species Female 33.77 33.33 50.00 20.67 71.43 50.00 16.67 33.33 28.57 33.33 25.67 33.33 25.67 33.33 25.67 33.33 25.67 33.33 25.67 33.33 25.67 33.33 25.67 33.33 25.67 33.33 25.67 37.59 Which meas Male 49.35 16.67 14.29 50.00 14.29 53.33 25.67 37.33 25.67 37.59 Which meas Male 66.3 14.43 55.00 14.29 55.00 14.29 53.33 14.29 57.60 55.00 17.43 56.67 7.50 Miniting Female 66.7 14.28 55.00 14.29 53.33 14.29 57.60 7.14 56.67 7.50 Parencisi Female 66.7	Activities	Gender	Overall (n=77) (%)	Milkipur (n=12) (%)	Sohawal (n=6) (%)	Harringtonganj (n=7) (%)	Mawai (n=4) (%)	Rudauli (n=7) (%)	Mayabazar (n=6) (%)	Bikapur (n=7) (%)	Masodha (n=3) (%)	Purabazar (n=8) (%)	Amaniganj (n=8) (%)	Tarun (n=9) (%)	o-value
Speciels Finale 33.77 33.33 50.00 22.67 33.33 25.00 37.14 33.33 25.00 37.14 33.33 25.00 37.14 33.33 35.00 37.14 33.33 35.00 37.14 33.33 35.00 37.14 33.33 35.00 37.14 33.33 35.00 37.14 33.33 35.00 37.14 33.33 35.00 37.35 37.50	Planting of	Male	53.25	50.00	33.33	71.43	50.00	57.14	50.00	42.86	66.67	62.50	62.50	44.44	0.98
Both 12.99 16.67 16.67 10.00 10.67 25.57 0.00 12.90 Wincharen Mile 49.35 41.67 66.67 11.43 50.00 11.43 50.00 12.67 0.00 12.60 Roth 20.78 25.00 16.67 14.29 50.00 14.29 56.67 25.50 How many Male 71.43 55.00 16.67 14.25 50.00 12.43 53.33 35.57 66.67 37.50 Powmers Male 71.43 55.00 14.29 16.67 14.29 10.00 12.69 0.00 12.50 Powmers Male 63.33 16.67 16.67 28.57 25.00 14.29 16.67 14.29 0.00 12.59 Particity Bath 66.67 28.50 28.57 25.50 24.28 33.33 25.50 25.50 26.50 26.50 26.50 26.50 26.50 26.50 26.50 26.50 26.50 26.50 2	species	Female	33.77	33.33	50.00	28.57	50.00	42.86	33.33	28.57	33.33	25.00	12.50	44.44	
Which area Male 4135 4117 66.67 7143 50.00 77.14 33.33 37.50 0 plart Female 31.17 33.33 16.67 14.29 50.00 71.43 56.07 37.33 both 31.17 75.00 66.67 42.86 50.00 71.43 56.67 37.50 How many Male 71.43 75.00 66.67 42.86 50.00 71.43 56.67 37.50 How many Male 31.73 33.33 66.67 42.86 50.00 71.43 56.00 71.43 56.00 71.43 56.00 71.43 56.00 71.43 56.00 72.50 55.00 14.29 33.33 14.29 50.00 72.60 75.00 56.67 42.86 50.00 71.43 55.00 74.29 33.33 12.50 55.00 74.29 56.00 72.66 74.28 75.00 75.00 75.00 75.00 75.00 75.00 75.00 75.00 75		Both	12.99	16.67	16.67	00.0	00.00	00'0	16.67	28.57	00.0	12.50	25.00	11.11	
IC plant Female 31.17 33.33 16.67 14.29 50.00 14.29 66.67 37.50 How many Mein 71.47 75.00 66.67 14.29 60.00 71.43 66.77 87.50 How many Mein 71.43 75.00 66.67 42.86 50.00 11.43 66.77 87.50 Mumbers ID Both 11.68 16.67 28.57 25.00 14.29 33.33 12.29 33.33 12.50 Mumbers ID Both 16.67 28.57 25.00 24.26 50.00 17.43 0.00 75.00 Menning Female 49.35 50.00 16.67 28.57 55.00 24.26 0.00 75.00 Menning Female 49.33 6.67 78.50 28.57 55.00 24.26 0.00 75.00 Menning Female 49.05 71.43 33.33 14.29 33.33 25.00 28.57 56.00 26.67<	Which are:	a Male	49.35	41.67	66.67	71.43	50.00	71.43	50.00	57.14	33.33	37.50	37.50	33.33	0.98
Both 2078 55.00 16.67 14.29 0.00 14.29 16.67 28.57 0.00 25.00 Hwmmary Male 71.43 75.00 16.67 14.28 55.00 71.43 56.07 71.43 76.00 72.56 72.56 72.56 72.56<	to plant	Female	31.17	33.33	16.67	14.29	50.00	14.29	33.33	28.57	66.67	37.50	37.50	33.33	
How many Male 71,43 75,00 66/7 42,86 50,00 71,43 66/67 87,50 How many Male 71,43 75,00 66/7 16/67 16/67 16/67 87,50 Plant Both 16/88 16/67 16/67 28/57 25.00 14/29 33.33 14/29 0.00 12.50 Season of Male 33.37 66/67 28/57 25.00 28/57 50.00 12.69 0.00 12.50 Planting Female 49.35 50.00 16/67 14/29 50.00 12.69 0.00 12.50 Planting Both 16/67 16/67 28/57 25.00 28/57 16/67 14/29 0.00 12.50 Planting Both 12.90 33.33 14,29 25.00 42.86 33.33 12.60 12.50 Planting Male 816.67 14,29 0.00 14.29 0.00 12.50 Planting E-male		Both	20.78	25.00	16.67	14.29	00.00	14.29	16.67	28.57	00 [.] 0	25.00	25.00	33.33	
Immunestor Female 6.68 16.67 16.67 28.57 25.00 14.29 33.33 14.29 33.33 12.50 Planting Both 11.69 8.33 16.67 28.57 25.00 14.29 16.67 14.29 0.00 0.00 Sesson 11.61 8.33 16.67 28.57 25.00 14.29 16.67 14.29 0.00 0.00 75.00 Renating Female 49.35 50.00 16.67 28.57 25.00 28.57 16.67 14.29 0.00 0.00 75.00 Pintangerial Male 65.23 50.00 66.67 14.29 75.00 27.14 85.33 100.00 75.00 Trianagrian Both 12.99 53.33 16.67 14.29 75.00 14.29 0.00 75.00 Trianagrian Male 56.65 58.33 50.00 42.86 50.00 12.50 Trianagrian Male 56.65 58	How many	Male	71.43	75.00	66.67	42.86	50.00	71.43	50.00	71.43	66.67	87.50	75.00	100.00	0.92
Dartition Both 11.69 8.33 16.67 28.57 25.00 14.29 16.67 14.29 0.00 0.00 Seeson of Male 33.77 33.33 66.67 42.86 50.00 42.86 50.00 75.00 Female 8.64 16.67 28.57 25.00 28.57 16.67 14.29 0.00 75.00 Financial Male 65.23 50.00 66.67 85.71 50.00 57.14 83.33 71.43 100.00 75.00 manageme Female 24.68 41.67 33.33 14.29 75.00 14.29 0.00 15.60 Female 24.66 16.67 25.00 25.00 25.00 25.00 14.29 0.00 12.59 Renther 24.66 14.57 33.33 71.43 25.00 25.00 25.00 25.00 25.00 25.00 25.50 Intransition Female 21.66 14.29 50.00 25.00 25	numbers to	^o Female	16.88	16.67	16.67	28.57	25.00	14.29	33.33	14.29	33.33	12.50	12.50	0.00	
Season of Male 33.77 33.33 66.67 4.2.86 50.00 16.57 52.00 12.50 Plaining Female 49.35 50.00 16.67 28.57 50.00 42.86 100.00 75.00 Financial Both 16.87 16.67 16.67 85.77 50.00 16.57 14.29 0.00 75.00 Financial Both 9.08 8.33 0.00 66.7 87.14 80.33 714.39 100.00 75.00 manageme Female 24.68 41.67 33.33 66.67 14.29 25.00 0.00 12.50 Pertilizer Male 50.65 58.33 50.00 14.29 25.00 28.57 66.67 75.14 66.67 75.00 Pringation Male 50.65 58.33 50.00 28.57 66.67 71.43 66.67 75.00 Pringation Male 50.65 58.33 50.00 28.57 66.67 71.43	plant	Both	11.69	8.33	16.67	28.57	25.00	14.29	16.67	14.29	00.0	00.00	12.50	0.00	
Planting Famale 49.35 50.00 16.67 28.57 25.00 28.57 50.00 75.00 Both 16.88 16.67 16.67 28.57 25.00 28.57 16.67 14.29 0.000 75.00 Male 66.23 50.00 66.67 28.57 25.00 28.57 14.59 0.00 75.00 Male 66.23 50.00 0.66.7 14.29 75.00 28.57 14.59 0.00 12.50 Manageme 74.49 50.05 41.67 33.33 14.29 75.00 25.00 0.00 14.29 0.00 12.50 Fertilizer Male 72.99 25.00 28.57 56.00 47.29 0.00 12.50 Prolingation Male 50.66 58.33 50.00 28.57 56.07 71.43 56.7 75.00 Prolingation Male 71.43 58.33 42.86 50.14 66.67 71.43 66.67 75.00	Season of	Male	33.77	33.33	66.67	42.86	50.00	42.86	33.33	42.86	00.0	12.50	25.00	22.22	0.83
Both 16.87 16.67 16.57 28.57 16.67 14.29 0.00 12.50 Tinancial Male 66.23 50.00 66.67 85.71 50.00 57.14 83.33 71.42 0.00 12.50 Tinanageme Female 8.41.67 33.33 66.67 85.71 50.00 57.14 83.33 71.42 0.00 12.50 Tennangeme Female 8.05 7.14 55.00 0.00 12.50 12.50 Retrilizer Male 50.65 58.33 66.67 14.29 0.00 12.50 12.50 Retrilizer Male 50.65 58.33 50.00 14.29 0.00 12.50 12.50 Retrilizer Female 50.65 58.33 50.00 28.57 56.00 57.14 66.67 65.50 Indjation Male 71.43 58.33 50.00 28.57 57.14 66.67 57.00 Remale 71.43 56.67	planting	Female	49.35	50.00	16.67	28.57	25.00	28.57	50.00	42.86	100.00	75.00	62.50	66.67	
Financial Male 66.23 50.00 66.67 13.33 71.43 100.00 75.00 manageme Female 24.68 41.67 33.33 14.29 25.00 42.86 16.67 14.29 0.00 12.50 manageme Female 24.68 41.67 33.33 14.29 25.00 0.00 12.50 12.50 Future 80:0 12.99 25.00 0.00 14.29 0.00 12.50 12.50 Roth 12.99 25.00 0.00 14.29 0.00 28.57 16.67 0.00 12.50 Roth 12.99 25.00 0.00 14.29 0.00 28.57 16.67 12.50 Roth 12.33 33.33 16.67 42.86 16.67 12.50 12.50 Pruning Male 50.65 58.33 50.00 28.57 16.67 12.50 Pruning Male 14.33 58.50 28.57 16.67 12.50<		Both	16.88	16.67	16.67	28.57	25.00	28.57	16.67	14.29	00.0	12.50	12.50	11.11	
manageme Female 24.68 41.67 33.33 14.29 25.00 42.86 16.67 14.29 0.00 12.50 nt Both 9.09 8.33 0.00 0.00 25.00 0.00 14.29 0.00 12.50 Fertilizer Male 38.96 33.33 66.67 14.29 75.00 42.86 33.33 25.00 12.50 Pplication Female 48.05 41.67 33.33 71.43 25.00 28.57 66.67 57.14 66.57 75.00 Pplication Male 71.43 58.33 50.00 28.57 66.67 57.14 66.67 75.00 Puning Male 71.43 58.33 50.00 28.57 16.67 74.29 0.00 12.56 Both 14.29 16.67 0.00 28.57 16.67 71.43 10.00 75.00 Female 35.33 16.67 14.29 0.00 28.57 16.67	Financial	Male	66.23	50.00	66.67	85.71	50.00	57.14	83.33	71.43	100.00	75.00	62.50	55.56	0.89
III Both 9.09 8.33 0.00 0.00 12.50 Fertilizer Male 38.96 33.33 66.67 14.29 75.00 42.86 33.33 25.00 application Female 48.05 41.67 33.33 66.67 14.29 75.00 57.14 66.67 62.50 application Female 50.65 58.33 50.00 28.57 16.67 0.00 12.50 Irigation Male 50.65 58.33 50.00 28.57 16.67 0.00 0.00 12.50 Irigation Male 50.65 58.33 50.00 28.57 16.67 14.29 0.00 12.50 Pruning Male 71.43 58.33 83.33 16.57 42.86 10.00 12.50 Pruning Male 71.43 58.33 14.28 16.67 71.43 10.00 75.00 Pruning Male 71.43 56.00 28.57 16.67	managem	^e Female	24.68	41.67	33.33	14.29	25.00	42.86	16.67	14.29	00 [.] 0	12.50	25.00	22.22	
Fertilizer Male 38:96 33.33 66.67 14.29 75.00 42.86 33.33 25.00 57.14 66.67 62.50 application Female 48.05 41.67 33.33 71.43 25.00 28.57 56.00 57.14 66.67 62.50 Irigation Male 50.65 58.33 50.00 14.29 0.00 28.57 16.67 0.00 12.50 Irigation Male 50.65 58.33 50.00 28.57 16.67 12.50 12.50 Pruning Both 14.29 56.00 28.57 16.67 14.29 0.00 12.50 Pruning Both 9.09 8.33 0.00 28.57 16.67 74.43 16.67 75.00 Harvesting Male 48.05 50.00 57.14 66.67 75.00 Both 9.09 8.33 0.00 28.57 16.67 74.32 10.00 75.00 Harvesting	IJ	Both	60.6	8.33	00.00	00.0	25.00	00.00	00.0	14.29	00.0	12.50	12.50	22.22	
application Female 48.05 41.67 33.33 71.43 25.00 28.57 50.00 57.14 66.67 62.50 Both 12.99 25.00 0.00 14.29 0.00 28.57 16.67 57.00 0.00 12.50 Female 50.65 58.33 50.00 42.86 50.00 28.57 16.67 57.14 66.67 75.00 Both 14.29 16.67 0.00 28.57 25.00 28.57 57.14 66.67 75.00 Pruning Male 71.43 58.33 83.33 42.86 100.00 28.57 16.67 74.29 0.00 75.00 Pruning Male 71.43 58.33 83.33 42.86 100.00 28.57 16.67 75.00 Female 71.43 58.33 83.33 16.67 42.86 10.00 71.43 100.00 75.00 Harvesting Male 41.56 41.429 0.00 14.29	Fertilizer	Male	38.96	33.33	66.67	14.29	75.00	42.86	33.33	42.86	33.33	25.00	50.00	33.33	0.88
Both 12.99 25.00 0.00 14.29 0.00 24.50 Irrigation Male 50.65 58.33 50.00 42.86 50.00 28.57 66.67 57.14 66.67 75.00 Enable 35.06 25.00 50.00 28.57 25.00 28.57 57.14 66.67 75.00 Both 14.29 16.67 0.00 28.57 25.00 28.57 16.67 73.33 12.50 Pruning Male 71.43 58.33 83.33 16.67 25.00 28.57 16.67 71.43 100.00 71.60 Female 19.48 33.33 16.67 25.00 71.43 66.67 71.43 100.00 75.00 Harvesting Male 71.43 58.33 83.33 14.29 0.00 14.29 0.00 0.00 70.00 70.00 Harvesting Male 71.43 56.67 71.43 16.67 14.29 0.00 71.43	applicatior	Female	48.05	41.67	33.33	71.43	25.00	28.57	50.00	57.14	66.67	62.50	37.50	55.56	
Irrigation Male 50.65 58.33 50.00 42.86 50.00 28.57 57.14 66.67 75.00 Female 35.06 25.00 50.00 28.57 25.00 42.86 16.67 28.57 33.33 12.50 Pruning Male 71.43 58.33 83.33 42.86 100.00 57.14 66.67 71.43 100.00 12.50 Pruning Male 71.43 58.33 83.33 42.86 0.00 28.57 16.67 71.43 100.00 75.00 Both 9.09 8.33 0.00 14.29 0.00 28.57 16.67 28.57 0.00 75.00 Harvesting Male 41.56 41.67 33.33 14.29 0.00 25.00 71.43 56.71 100.00 75.00 Both 10.39 8.33 16.67 14.29 56.07 14.29 66.67 71.42 65.70 25.00 Both 10.39		Both	12.99	25.00	00.00	14.29	00.00	28.57	16.67	00.0	0.00	12.50	12.50	11.11	
Female 35.06 25.00 50.00 28.57 25.00 42.86 16.67 28.57 33.33 12.50 Both 14.29 16.67 0.00 28.57 16.67 14.29 0.00 12.50 Pruning Male 71.43 58.33 83.33 42.86 100.00 57.14 66.67 71.43 100.00 75.00 Both 9.09 8.33 0.00 14.29 0.00 28.57 16.67 28.57 0.00 75.00 Harvesting Male 71.43 58.33 16.67 42.86 0.00 28.57 16.67 28.57 0.00 75.00 Harvesting Male 41.67 33.33 14.29 0.00 14.29 0.00 75.00 Both 10.39 8.33 16.67 14.29 56.00 71.43 16.67 14.29 0.00 75.00 Sale Male 57.14 58.33 16.67 28.57 16.67 14.29	Irrigation	Male	50.65	58.33	50.00	42.86	50.00	28.57	66.67	57.14	66.67	75.00	75.00	0.00	0.12
Both 14.29 16.67 0.00 28.57 16.67 14.29 0.00 12.50 Pruning Male 71.43 58.33 83.33 42.86 100.00 57.14 66.67 71.43 100.00 75.00 Female 19.48 33.33 16.67 42.86 0.00 14.29 16.67 71.43 100.00 75.00 Both 9.09 8.33 0.00 14.29 0.00 14.29 16.67 28.57 10.60 75.00 Harvesting Male 87.14 58.33 0.00 14.29 0.00 71.43 16.67 75.00 Female 10.39 8.33 16.67 14.29 50.00 71.43 16.67 14.29 0.00 12.50 Both 10.39 8.33 16.67 14.29 50.00 71.43 16.67 71.429 0.00 12.50 Both 10.39 8.33 16.67 28.57 16.67 14.29 0.00		Female	35.06	25.00	50.00	28.57	25.00	42.86	16.67	28.57	33.33	12.50	12.50	100.00	
Pruning Male 71.43 58.33 83.33 42.86 100.00 57.14 66.67 71.43 100.00 75.00 Female 19.48 33.33 16.67 42.86 0.00 28.57 16.67 28.57 0.00 0.00 25.00 Harvesting Male 9.09 8.33 0.00 14.29 0.00 14.29 16.67 28.57 0.00 25.00 Harvesting Male 48.05 50.00 50.00 71.43 25.00 14.29 66.67 71.42 0.00 75.00 Both 10.39 8.33 14.29 50.00 71.43 16.67 14.29 0.00 12.50 Sale Male 57.14 58.33 66.67 42.86 50.00 71.43 16.67 14.29 0.00 12.50 Sale Male 57.14 58.33 66.67 42.86 57.14 33.33 12.50 Sale Male 27.14 58.33		Both	14.29	16.67	00.00	28.57	25.00	28.57	16.67	14.29	00.0	12.50	12.50	00.00	
Female 19.48 33.33 16.67 42.86 0.00 28.57 16.67 28.57 0.00 0.00 20.00 Both 9.09 8.33 0.00 14.29 0.00 14.29 16.67 28.57 0.00 25.00 Harvesting Male 48.05 50.00 50.00 71.43 25.00 14.29 66.67 85.71 100.00 75.00 Both 10.39 8.33 16.67 33.33 14.29 50.00 71.43 15.67 85.71 100.00 75.00 Both 10.39 8.33 16.67 14.29 50.00 71.43 15.67 15.67 12.50 Sale Male 57.14 58.33 66.67 42.86 50.00 25.00 12.50 Sale Male 57.14 58.33 66.67 28.57 16.67 14.29 33.33 12.50 Female 27.08 16.67 28.57 16.67 14.29 33.33 12.50 </td <td>Pruning</td> <td>Male</td> <td>71.43</td> <td>58.33</td> <td>83.33</td> <td>42.86</td> <td>100.00</td> <td>57.14</td> <td>66.67</td> <td>71.43</td> <td>100.00</td> <td>75.00</td> <td>75.00</td> <td>88.89</td> <td>0.74</td>	Pruning	Male	71.43	58.33	83.33	42.86	100.00	57.14	66.67	71.43	100.00	75.00	75.00	88.89	0.74
Both 9.09 8.33 0.00 14.29 0.667 66.67 85.71 100.00 25.00 Harvesting Male 48.05 50.00 50.00 70.01 14.29 66.67 85.71 100.00 75.00 Both 10.39 8.33 16.67 14.29 50.00 71.43 25.00 71.43 16.67 14.29 0.00 75.00 Both 10.39 8.33 16.67 14.29 50.00 71.43 16.67 14.29 0.00 12.50 Sale Male 57.14 58.33 66.67 42.86 50.00 28.57 16.67 14.29 0.00 12.50 Sale Male 57.14 58.33 66.67 42.86 56.00 28.57 16.67 14.29 33.33 12.50 Female 20.78 16.67 28.57 26.00 28.57 16.67 28.57 33.33 12.50 Processing Male 23.33 16.67 28.57		Female	19.48	33.33	16.67	42.86	00.00	28.57	16.67	28.57	00.0	00.00	12.50	11.11	
Harvesting Male 48.05 50.00 50.00 71.43 25.00 14.29 66.67 85.71 100.00 75.00 Female 41.66 41.67 33.33 14.29 50.00 71.43 16.67 14.29 0.00 12.50 Both 10.39 8.33 16.67 14.29 25.00 14.29 16.67 14.29 0.00 12.50 Sale Male 57.14 58.33 66.67 42.86 50.00 42.86 66.67 57.14 33.33 75.00 Sale Male 27.14 58.33 66.67 42.86 50.00 28.57 16.67 14.29 33.33 12.50 Female 20.78 16.67 28.57 25.00 28.57 16.67 42.86 0.00 12.50 Processing Male 23.38 16.67 28.57 25.00 28.57 16.67 42.86 0.00 12.50 Processing Male 23.34 75.00 66.67 42.8		Both	60.6	8.33	0.00	14.29	00.00	14.29	16.67	00.0	00.0	25.00	12.50	0.00	
Female 41.56 41.67 33.33 14.29 50.00 71.43 16.67 14.29 0.00 12.50 Both 10.39 8.33 16.67 14.29 16.67 0.00 12.50 Both 10.39 8.33 16.67 14.29 16.67 0.00 12.50 Sale Male 57.14 58.33 66.67 42.86 50.00 42.86 66.67 57.14 33.33 75.00 Female 22.08 25.00 16.67 28.57 16.67 14.29 33.33 12.50 Both 20.78 16.67 16.67 28.57 16.67 28.57 15.60 Processing Male 23.38 16.67 28.57 25.00 42.86 66.67 42.86 0.00 75.00 Female 62.34 75.00 66.67 42.86 66.67 42.86 0.00 75.00 Both 14.29 8.33 16.67 28.57 26.00 74.28 <td>Harvesting</td> <td>Male</td> <td>48.05</td> <td>50.00</td> <td>50.00</td> <td>71.43</td> <td>25.00</td> <td>14.29</td> <td>66.67</td> <td>85.71</td> <td>100.00</td> <td>75.00</td> <td>12.50</td> <td>11.11</td> <td>0.05</td>	Harvesting	Male	48.05	50.00	50.00	71.43	25.00	14.29	66.67	85.71	100.00	75.00	12.50	11.11	0.05
Both 10.39 8.33 16.67 14.29 25.00 14.29 16.67 0.00 0.00 12.50 Sale Male 57.14 58.33 66.67 42.86 50.00 42.86 66.67 57.14 33.33 75.00 Female 22.08 25.00 14.29 28.57 16.67 57.14 33.33 75.00 Both 20.78 16.67 16.67 28.57 25.00 28.57 16.67 33.33 12.50 Processing Male 23.38 16.67 16.67 28.57 25.00 28.57 16.67 42.86 0.00 75.00 Female 62.34 75.00 66.67 28.57 25.00 28.57 28.57 16.67 42.86 0.00 75.00 Both 14.29 8.33 16.67 28.57 25.00 42.86 66.67 42.86 0.00 75.00 Female 62.34 75.00 66.67 28.57 25.00 42.		Female	41.56	41.67	33.33	14.29	50.00	71.43	16.67	14.29	00.00	12.50	75.00	88.89	
Sale Male 57.14 58.33 66.67 42.86 50.00 42.86 56.67 57.14 33.33 75.00 Female 22.08 25.00 16.67 28.57 16.67 14.29 33.33 75.00 Both 20.78 16.67 16.67 28.57 25.00 28.57 16.67 14.29 33.33 12.50 Processing Male 23.38 16.67 16.67 28.57 25.00 42.86 16.67 42.86 0.00 12.50 Female 62.34 75.00 66.67 42.86 50.00 42.86 66.67 42.86 0.00 75.00 Female 62.34 75.00 66.67 42.86 66.67 42.86 0.00 75.00 Both 14.29 8.33 16.67 28.57 25.00 14.29 0.00 12.50		Both	10.39	8.33	16.67	14.29	25.00	14.29	16.67	00.00	00.00	12.50	12.50	00.00	
Female 22.08 25.00 16.67 28.57 16.67 14.29 33.33 12.50 Both 20.78 16.67 16.67 16.67 14.29 33.33 12.50 Processing Male 23.38 16.67 16.67 28.57 25.00 28.57 16.67 33.33 12.50 Female 23.38 16.67 16.67 28.57 25.00 42.86 16.67 42.86 0.00 12.50 Female 62.34 75.00 66.67 42.86 56.67 42.86 66.67 42.86 100.00 75.00 Both 14.29 8.33 16.67 28.57 25.00 14.29 10.00 75.00	Sale	Male	57.14	58.33	66.67	42.86	50.00	42.86	66.67	57.14	33.33	75.00	62.50	55.56	1.00
Both 20.78 16.67 16.67 28.57 25.00 28.57 16.67 28.57 33.33 12.50 Processing Male 23.38 16.67 16.67 28.57 25.00 28.57 25.00 16.67 33.33 12.50 Female 23.34 75.00 66.67 42.86 66.67 42.86 0.00 75.00 Both 14.29 8.33 16.67 28.57 25.00 14.29 0.00 12.50		Female	22.08	25.00	16.67	28.57	25.00	28.57	16.67	14.29	33.33	12.50	25.00	22.22	
Processing Male 23.38 16.67 16.67 28.57 25.00 42.86 16.67 42.86 0.00 12.50 Female 62.34 75.00 66.67 42.86 50.00 42.86 66.67 42.86 100.00 75.00 Both 14.29 8.33 16.67 28.57 25.00 14.29 16.67 14.29 0.00 12.50		Both	20.78	16.67	16.67	28.57	25.00	28.57	16.67	28.57	33.33	12.50	12.50	22.22	
Female 62.34 75.00 66.67 42.86 50.00 42.86 66.67 42.86 100.00 75.00 Both 14.29 8.33 16.67 28.57 25.00 14.29 16.67 14.29 0.00 12.50	Processinç) Male	23.38	16.67	16.67	28.57	25.00	42.86	16.67	42.86	00.0	12.50	25.00	22.22	0.99
Both 14.29 8.33 16.67 28.57 25.00 14.29 16.67 14.29 0.00 12.50		Female	62.34	75.00	66.67	42.86	50.00	42.86	66.67	42.86	100.00	75.00	62.50	66.67	
		Both	14.29	8.33	16.67	28.57	25.00	14.29	16.67	14.29	00.0	12.50	12.50	11.11	

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Masodha Purabazar Amaniganj Tarun p-value (n=3) (%) (n=8) (%) (n=9) (%)	100.00 75.00 12.50 11.11 0.05	0.00 12.50 75.00 88.89 0.00 12.50 12.50 0.00	33.33 75.00 62.50 55.56 1.00	33.33 12.50 25.00 22.22	33.33 12.50 12.50 22.22	0.00 12.50 25.00 22.22 0.99	100.00 75.00 62.50 66.67	0.00 12.50 12.50 11.11	100.00 50.00 50.00 44.44 1.00	0.00 37.50 37.50 33.33	0.00 12.50 12.50 22.22	
Bikapur (n=7) (%)	85.71	14.29 0.00	57.14	14.29	28.57	42.86	42.86	14.29	28.57	42.86	28.57	
Mayabazar (n=6) (%)	66.67	16.67 16.67	66.67	16.67	16.67	16.67	66.67	16.67	50.00	33.33	16.67	
Rudauli (n=7) (%)	14.29	71.43 14.29	42.86	28.57	28.57	42.86	42.86	14.29	42.86	42.86	14.29	
Mawai (n=4) (%)	25.00	50.00 25.00	50.00	25.00	25.00	25.00	50.00	25.00	50.00	25.00	25.00	
Harringtonganj (n=7) (%)	71.43	14.29 14.29	42.86	28.57	28.57	28.57	42.86	28.57	71.43	14.29	14.29	
Sohawal (n=6) (%)	50.00	33.33 16.67	66.67	16.67	16.67	16.67	66.67	16.67	50.00	33.33	16.67	
Milkipur (n=12) (%)	50.00	41.67 8.33	58.33	25.00	16.67	16.67	75.00	8.33	50.00	33.33	16.67	
Overall (n=77) (%)	48.05	41.56 10.39	57.14	22.08	20.78	23.38	62.34	14.29	50.65	32.47	16.88	is (p < 0.05)
Gender	g Male	Female Both) Male	Female	Both	ng Male	Female	Both	Male	^p Female	Both	f significance
Activities	Harvestin		Marketing			Processir			Tree	ownersni		The level o

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Table 6. Fact	ors hinde	sring gen	der adopti	on of agrofo	restry system:	s of Ayodhy	a district, U	ttar Pradesh						
Factors	Gender	Overall (n=77) (%)	Milkipur (n=12) (%)	Sohawal (n=6) (%)	Harringtonganj (n=7) (%)	Mawai (n=4) (%)	Rudauli (n=7) (%)	Mayabazar (n=6) (%)	Bikapur (n=7) (%)	Masodha (n=3) (%)	Purabazar (n=8) (%)	Amaniganj (n=8) (%)	Tarun (n=9) (%)	p-value
Lack of	Male	51.95	41.67	33.33	71.43	50.00	42.86	50.00	57.14	33.33	62.50	50.00	66.67	0.57
transportation	Female	18.18	00.0	33.33	14.29	25.00	28.57	16.67	42.86	33.33	12.50	0.00	22.22	
	Both	29.87	50.00	33.33	14.29	25.00	28.57	33.33	00'0	33.33	25.00	50.00	11.11	
Limited	Male	51.95	41.67	33.33	71.43	50.00	42.86	50.00	57.14	33.33	62.50	50.00	66.67	
business and negotiation	Female	00.00	00.0	00.00	0.00	0.00	0.00	0.00	00.0	00.0	0.00	0.00	0.00	
skills	Both	48.05	50.00	66.67	28.57	50.00	57.14	50.00	42.86	66.67	37.50	50.00	33.33	
Family	Male	00.0	00.0	00.00	0.00	00.00	0.00	0.00	0.00	00.00	0.00	0.00	0.00	
opposition	Female	51.95	41.67	33.33	71.43	50.00	42.86	50.00	57.14	33.33	62.50	50.00	66.67	
	Both	48.05	50.00	66.67	28.57	50.00	57.14	50.00	42.86	66.67	37.50	50.00	33.33	
Limited	Male	42.86	41.67	33.33	57.14	25.00	28.57	50 <u>.</u> 00	42.86	33.33	50.00	50 [.] 00	44.44	0.91
products	Female	12.99	16.67	16.67	14.29	0.00	00.00	33.33	14.29	00.0	12.50	25.00	0.00	
	Both	44.16	33.33	50.00	28.57	75.00	71.43	16.67	42.86	66.67	37.50	25.00	55.56	
High initial	Male	45.45	66.67	50.00	14.29	75.00	28.57	16.67	57.14	0.00	50.00	50.00	44.44	0.34
investment	Female	19.48	16.67	00.00	28.57	0.00	42.86	33.33	14.29	00.0	12.50	25.00	22.22	
	Both	35.06	8.33	50.00	57.14	25.00	28.57	50.00	28.57	100.00	37.50	25.00	33.33	
Lack of	Male	37.66	33.33	33.33	14.29	50.00	57.14	16.67	57.14	00.0	50.00	62.50	22.22	0.18
extension activities	Female	28.57	25.00	00.0	71.43	0.00	14.29	50.00	00.0	66.67	37.50	12.50	44.44	
	Both	33.77	33.33	66.67	14.29	50.00	28.57	33.33	42.86	33.33	12.50	25.00	33.33	
Poor	Male	40.26	33.33	50.00	0.00	100.00	14.29	33.33	42.86	00.0	50.00	62.50	44.44	0.25
understanding of tree	Female	24.68	25.00	33.33	28.57	00.0	42.86	16.67	28.57	00.0	25.00	12.50	33.33	
management	Both	35.06	33.33	16.67	71.43	00.0	42.86	50.00	28.57	100.00	25.00	25.00	22.22	
Limited land	Male	31.17	16.67	66.67	00'0	25.00	28.57	16.67	28.57	33.33	37.50	50.00	44.44	0.26
availability	Female	23.38	33.33	00.0	42.86	0.00	42.86	00.0	42.86	33.33	0.00	12.50	33.33	
	Both	45.45	41.67	33.33	57.14	75.00	28.57	83.33	28.57	33.33	62.50	37.50	22.22	
Limited cash	Male	31.17	33.33	00.0	57.14	00.00	14.29	33.33	42.86	00.0	37.50	25.00	55.56	0.18
availability	Female	40.26	25.00	100.00	14.29	25.00	57.14	50.00	42.86	33.33	37.50	50.00	22.22	
	Both	28.57	33.33	00.0	28.57	75.00	28.57	16.67	14.29	66.67	25.00	25.00	22.22	
Absence of a	Male	35.06	33.33	50.00	14.29	75.00	42.86	16.67	00.0	100.00	12.50	62.50	33.33	0.03
guiding policy on agroforestry	, Female	22.08	33.33	00.0	42.86	00.00	42.86	50.00	00.0	00.0	25.00	00.00	22.22	
)	Both	42.86	25.00	50.00	42.86	25.00	14.29	33.33	100.00	0.00	62.50	37.50	44.44	
The level of signi	ficance is (p	o < 0.05)												

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Table 7 Gender	-wise reco	ommend:	ations for	adoption	of agroforestry	/ systems i	n Ayodhya	district, Uttaı	r Pradesh					
Recommendations	s Gender	Overall (n=77) (%)	Milkipur (n=12) (%)	Sohawal I (n=6) (%)	Harringtonganj (n=7) (%)	Mawai (n=4) (%)	Rudauli (n=7) (%)	Mayabazar (n=6) (%)	Bikapur (n=7) (%)	Masodha (n=3) (%)	Purabazar (n=8) (%)	Amaniganj (n=8) (%)	Tarun p (%) (%)	o-value
Develop	Male	35.06	50.00	50.00	28.57	50.00	42.86	16.67	28.57	33.33	37.50	12.50	33.33	0.63
infrastructure for	Female	22.08	16.67	16.67	14.29	00.00	42.86	66.67	14.29	33.33	12.50	25.00	11.11	
	Both	42.86	33.33	33.33	57.14	50.00	14.29	16.67	57.14	33.33	50.00	62.50	55.56	
Training on	Male	37.66	33.33	33.33	28.57	25.00	28.57	16.67	42.86	33.33	62.50	37.50	55.56	
production of	Female	18.18	16.67	16.67	28.57	25.00	00.0	16.67	28.57	00.00	12.50	25.00	22.22	
products	Both	44.16	50.00	50.00	42.86	50.00	71.43	66.67	28.57	66.67	25.00	37.50	22.22	
Training in tree	Male	59.74	66.67	66.67	57.14	50.00	85.71	83.33	57.14	66.67	50.00	37.50	44.44	
management	Female	40.26	33.33	33.33	42.86	50.00	14.29	16.67	42.86	33.33	50.00	62.50	55.56	
	Both	00.00	00.0	00.0	00.00	0.00	00.00	00.00	00.0	00.0	00.00	00.00	0.00	
Easy micro-credit	Male	15.58	16.67	16.67	14.29	00.0	14.29	16.67	28.57	00.0	25.00	00.00	22.22	0.98
arrangement	Female	18.18	16.67	16.67	28.57	25.00	00.00	16.67	28.57	00.0	12.50	25.00	22.22	
	Both	66.23	66.67	66.67	57.14	75.00	85.71	66.67	42.86	100.00	62.50	75.00	55.56	
Policy intervention:	s Male	20.78	16.67	33.33	14.29	0.00	14.29	16.67	28.57	00.0	37.50	00.00	44.44	0.70
	Female	41.56	50.00	50.00	57.14	75.00	42.86	16.67	42.86	33.33	25.00	37.50	33.33	
	Both	37.66	33.33	16.67	28.57	25.00	42.86	66.67	28.57	66.67	37.50	62 <u>.</u> 50	22.22	
The level of significan	ce is (p < 0.	05)												

significant difference across the blocks for limited product, poor understanding of tree management, limited land availability and absence of a guiding policy on agroforestry as a hinderance in agroforestry systems adoption. Birhanu and Guye (2022) concluded that limited product was seen as a major hindrance by males. The limited cash availability across all the blocks was seen as a hindrance, the highest by females and least by both gender and it was not statistically significantly different across the blocks. Across all the blocks, implication of development of infrastructure for transport and storage, training on production of value-added products were seen as interventions, the highest in both genders and least by females (Table 7). There was no statistically significant difference across the blocks for infrastructure development and training on production as interventions. Catacutan and Naz (2015) in Northwest Vietnam, observed that males recommended for better infrastructure for transport and storage in agroforestry systems as compared to that of females. Birhanu and Guye (2022) concluded that females perceived training on production of value-added products as a major intervention than males. Training in tree management was reported to be the foremost requirement, the highest by the males and the least by both the genders. Implication of easy micro-credit arrangement was seen as the intervention the highest in both genders and least by males and there was no statistically significant difference across the blocks for micro-credit arrangement. Implication of policy interventions was seen as an intervention, the highest in females and least by males but it was not statistically significantly different across the blocks.

CONCLUSION

The agroforestry practices in Ayodhya district were still men-centric and men-dominated. Males were involved in agroforestry activities such as ploughing, tree planting, fertilization, pruning, harvesting, transport and sales and had higher access to land ownership, land transfer rights, loans and irrigation facilities. The decision on planting of species, which area to plant, how many numbers of plants to be planted, irrigation, pruning, harvesting and sale were mostly taken by males. They also enjoyed the rights of harvesting, marketing and tree ownership. Lack of transportation, limited business and negotiation skills, high initial investment, lack of extension activity were seen as hindrances in adoption of agroforestry systems according to the males of the region and were of the opinion that interventions such as easy micro-credit arrangement, development of infrastructure for transport and storage, training on production of value-added products could help in faster adoption of the system. Females preferred fruit bearing trees whereas the men preferred

timber-yielding trees. The decision on season of planting, financial management, fertilizer application and processing were mostly taken by females and they enjoyed the right of processing of agroforestry products. The family opposition and limited cash availability were seen as hindrances by the females in adoption of agroforestry systems and they stressed on policy interventions to improve the adoption rate of agroforestry systems. This study revealed that the societal pressure on females still exists in this region which restricted the females from becoming financial independent and decision makers. So, a high level policy intervention and changes in social behaviour and attitudes is required to cherish the dream of women empowerment in this region.

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