

GENDER ROLE IN AGROFORESTRY

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Abstract

The objective of the study was to identify the role of women and men in agroforestry practices of district Attock. The results of the study indicate that both the genders were involved in agroforestry practices. However, males hesitate to accept female participation in the agroforestry activities because social customs and norms restrict women role in the on-farm activities. Contrary to the 17% male, 54% of the female respondents confirmed their participation in agroforestry works.

Introduction

During early 1970s, forestry development policies began to deviate from production and industrial sector oriented policies. The new focus was on adopting rural development through participatory approach. Community, Social, and Agroforestry etc were the efforts designed to address the interrelated problems of environmental degradation and rural poverty. Promotion of local people as the agents and beneficiaries of forestry activities was the main thrust of all the developmental projects. The forest policies focussed at building upon the knowledge of local women and men by considering their needs and priorities and to integrate forestry with agriculture, livestock production and small scale industries.

Development initiatives aiming at forestry promotion to improve the livelihood of local people must take into account gender based division of labour, access to resources and control over resource management. Otherwise, decisions will be based on mistaken assumptions. Gender disaggregated information reveals the relationship between people and forests, how women and men use and manage forest resource and the importance of these activities for subsistence and income. This division of information also describes what rural women and men know and what they need. Without such information, forestry development efforts may not be appropriately designed and may result in negative impacts or failure to reach objectives.

Keeping in mind less importance given to women in project activities, a study was carried out in Attock District about gender issues in different agroforestry practices, with the following objectives:

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- i. To study the role of women and men in different agroforestry practices.
- ii. To identify problems related to gender role performance in existing agroforestry practices.
- iii. To study the prospects and opportunities ensuring equal participation of both gender in sustainable development of agroforestry practices.

Methodology

In order to collect the data on gender participation, a social survey was conducted. Stratified Random Sampling design was applied for the selection of respondents. At first stage two tehsils namely Attock and Jand were selected randomly out of total five tehsils and then one Kanungo circle was selected from each of the two tehsils. In the next stage three Patwar circles of the selected Kanungo areas of the tehsil Attock and two of the tehsil Jand were randomly chosen. At village level, two were selected, from each Patwar circle randomly making the total village number up to 10. At the final stage fifteen (15) household heads were selected randomly in each village by using lists of voters, but only ten (10) were interviewed among the sample of fifteen (15). In all, hundred household heads were interviewed. In order to determine the reliability and authenticity of information regarding role of female gender, both genders were put the same questions. So fifty nine (59) male and forty one (41) female household heads were interviewed.

Pre-designed and pre-tested questionnaire was used as a research instrument for the survey. Although the instrument was constructed in English, yet the questions were asked in Urdu or Punjabi (local language) in the informal and friendly atmosphere for the convenience of the respondents and to get the maximum accuracy in information.

The data collected through questionnaires were coded and arranged for statistical analysis using simple averages and percentages. The Chi square analysis was also carried out to draw conclusion and formulate suggestions about the gender participation in the agroforestry practices.

Results and Discussion

The gender wise distribution of respondents were 41% females and 59% males. Social grouping in the study area was generally based on farm size. The owners who operate their farms through tenants with 45 acres of average farm size were categorized as High class; self cultivators who may or may not be using tenants with 20 acres of average farm size were categorized as Medium class; the landless tenants with both male and female working on farms were categorized as Low Medium class; and landless

working on daily wages were categorized as Low. Only 15% of the respondents belong to high social group while the respondents having medium, low-medium and low social status groups comprise 51%, 19% and 15% respectively.

Farm operations and social classes

Lack of mechanization, physical hardwork and social restrictions inhibit affluent farm owners to undertake independent cultivation operations and thus forced to employ tenants. The owners of the medium and small farms, contrary to the highly placed farmers, carry out agricultural operations with or without the help of tenants (Table 1). However, tenants are generally engaged for labour specific jobs. The females belonging to the household of high and medium social status are socially not allowed to take part in the farm activities. Contrary to this, females of the small owners and tenants always share the work at farms with their husbands.

Table 1. Gender wise Farm Operation According to Social Classes

Farm Operation	Gender							
	Male				Females			
	Social Classes				Social Classes			
	High	Medium	Low Medium	Low	High	Medium	Low Medium	Low
Tenants operated	10 (100%)	-	-	-	-	-	-	-
Self +, -Tenants	-	37 (100%)	6 (100%)	-	-	-	13 (100%)	-
Land Less Tenants	-	-	-	6 (100%)	-	-	-	9 (100%)
Not Working	-	-	-	-	5 (100%)	14 (100%)	-	-
Total	10	37	6	6	5	14	13	9

Gender issues in agroforestry

Gender reaction about tree planting

The study revealed unexpected results as far as tree planting activity is concerned. The data indicated that the majority (80%) of the female population was in favour of planting trees. The higher liking for tree planting activity by the female gender is probably because of fire wood and fodder requirement of the household. They are using animal dung and agricultural residues as substitutes to the fuelwood. The collection and

preparation of these for fuel purposes is not only labour intensive and cumbersome but also low in energy contents as compared to fuelwood.

Social classes and tree planting

The majority (80%) of males belonging to highest social group was in favour of tree planting (Table 2). Contrary to many early findings, majority (83%) of the tenants were also in favour of growing trees. However, female gender of all the social groups was in favour of growing trees probably because of scarcity of wood for energy purpose.

Table 2. Reaction About Tree Planting According to Social Classes

Likeness	Gender							
	Male				Female			
	Social Classes				Social Classes			
	High	Medium	Low Medium	Low	High	Medium	Low Medium	Low
Yes	8 (80%)	11 (30%)	2 (34%)	5 (83%)	4 (80%)	11 (79%)	10 (77%)	8 (89%)
No	2 (20%)	26 (70%)	4 (66%)	1 (17%)	1 (20%)	3 (21%)	3 (23%)	1 (11%)
Total	10	37	6	6	5	14	13	9

Species preferences for agroforestry

Kikar (*Acacia nilotica*) was the most preferred species by both male and female gender of the sample population (Table 3). This species is mostly preferred because of its growth rate, multipurpose use, high calorific value, and comparatively higher market price.

Eucalyptus and poplar are the least preferred species in the list. Although, both the species are very fast growing but can tax soil moisture and nutrients very heavily. Phulai (*Acacia modesta*) and Ber (*Zizyphus murtiana*) inspite of slow growth rate are preferred for fodder and firewood values and high survival rate under given local climatic conditions.

Purpose of growing trees

The main aim of growing trees by both the male and female gender was to obtain firewood and fodder from trees. Table 4 shows that the sampled population responded differently to the purpose of tree growing on farmland.

Table 3. Species Preferences According to Gender

Species	Gender	
	Male	Female
Kikar	12 (47%)	15(45%)
Shisham	06(23%)	13(39%)
Phulai & Ber	04(15%)	05(16%)
Eucalyptus	02(15%)	-
Total	24	33

Kikar = *Acacia nilotica*, Shisham = *Dalbergia sissoo*, Phulai = *Acacia modesta*, Ber = *Zizyphus murtiana*.

The data indicate that only a small portion (15%) of the male gender was growing trees for income by planting fast growing tree species (23%) respondents were planting trees for timber and firewood. The highest number (35%) liked trees because of their firewood value and other were in favour of trees because of their use as firewood and fodder (27%).

The major purpose of female gender to plant trees was firewood (67%). Firewood and fodder were the objective of 24% women and the motive of only 9% women was timber and firewood. However, the majority of the sampled population irrespective of sex was in favour of planting trees for the purpose of fuelwood and fodder.

Table 4. Purpose of Growing Trees

Purpose	Gender	
	Male	Female
Income	4 (15%)	0 (0%)
Timber & Firewood	6 (23%)	3 (09%)
Firewood	9 (35%)	22 (67%)
Firewood and Fodder	7 (27%)	8 (24%)
Total	26	33

Decision making authority

Decision making authority for agroforestry system was vested in the male members of the family. However, a small portion (7%) of the female members was also found to have decision making authority in tree planting. These females were taking decisions only when the authoritative male members were either away from the home to earn livelihood or passed away.

Participation in agroforestry

Data indicate that the majority (54%) female respondents confirmed its equal participation in agroforestry works (Table 5). Only 17% male respondents admitted equal participation of female in the agroforestry practices. This variation in answers was most probably because of society-dislikes for the participation of female in agroforestry practices. The male gender commonly hesitated to respond to respective question as freely as the female members did.

Table 5. Participation in Agroforestry

Participation	Gender	
	Male	Female
Yes	16 (17%)	22 (54%)
No	43 (83%)	19 (46%)
Total	59	41

Gender activities in agroforestry

Majority (64%) male population was involved in planting activity (Table 6). A small number of respondents (9%) reported that both male and female gender participated collectively in the planting activities. Lopping was mostly carried out by the males (89%) where a female gender was mostly entrusted with weeding activity (75%).

Improvement in agroforestry production by the female gender

Data revealed that larger portion (63%) of the female gender claimed the enhancement of agroforestry productivity. They also perceived that their suggestions were also taken into consideration by the male members while making decision about agroforestry practices.

Table 6. Activities of Gender in Agroforestry

Gender	Activities						
	Planting	Lopping	Weeding	Protection	Harvesting & Conversation	Agriculture	Livestock Mgt.
Male	36(64%)	50(89%)	21(38%)	39(70%)	56(100%)	40(47%)	37(44%)
Female	-	-	25(45%)	-	-	8(9%)	12(14%)
Both (Male & Female)	5(9%)	6(11%)	8(14%)	-	-	-	-
None	15(27%)	-	2(3%)	17(30%)	-	37(44%)	36(42%)
Total	56	56	56	56	56	85	85
Male (Labour)	12(80%)	12(80%)	7(47%)	13(87%)	15(100%)	5(33%)	5(33%)
Female(Labour)	-	-	6(40%)	-	-	3(20%)	4(27%)
Both Male and Female Labour)	3(20%)	3(20%)	2(13%)	2(13%)	-	7(47%)	6(40%)
Total	15	15	15	15	15	15	15

Problems for participation in agroforestry practices

Loss in agriculture productivity was the unanimous perception of both males and females (Table 7). Social norms, male dominance and restricted access were the major problems faced by the female population in practicing agroforestry.

Table 7. Problems in Practicing Agroforestry

Problems	Gender	
	Male	Female
Loss in agri. Production	59(100%)	41(100%)
Availability of seedlings	23 (39%)	12(29%)
Absence of irrigation	16 (27%)	15(35%)
Maintenance and manpower	9 (15%)	4(5%)
Social norms	-	23(56%)
Male dominance	-	16(39%)
Access to farm land	-	17(42%)

Incentives

About 37% of the male demanded incentives to promote agroforestry. Contrary to this, female gender asked for the grant of incentives for proper implementation and improvement in the agroforestry techniques. However, majority of both the genders (63% and 56%) was not in favour of any incentives (Table 8).

Table 8. Type of Incentives demanded for practicing agroforestry

Type of Incentives	Gender	
	Male	Female
Seed + nursery plants	11(51%)	—
Seedlings + guidance + recent information	7 (28%)	—
Seedlings + land	4(21%)	5(28%)
Male gender should grow trees	—	8(44%)
Land lord should grow trees for tenants	—	5(28%)
Total	22	18

Training

Majority (41%) male population was in favour of training in agroforestry techniques whereas small portion (22%) of the females favoured training.

Jobs of female gender

Almost all women (100%) were performing household jobs as per socially acceptable norms. The data indicated that the majority (59%) of the female respondents was also engaged in firewood collection equally larger women folk (56%) was bringing potted water in addition to regular house jobs. However, appreciable portion (44%) of females respondents was not additionally burdened with the job of bringing potted water.

Extra time for agroforestry practices

Data revealed that 49% male respondents can spare extra time for agroforestry activities. Only 24% female managed to carry out agroforestry in extra time under prevailing schedule of work. However, majority of the respondents of both male (51%) and female (76%) gender revealed that no extra time was available to carry out agroforestry efficiently.

It is evident from the data that women are burdened with more work because of the domestic and farm responsibilities. Therefore, this heavy workload should properly be distributed among both of the male and female gender.

Conclusion

The data analysis clearly indicated that resource related activities of both the women and men clarified the role difference and the complementary nature of role in the society. In agroforestry practices, both male and female genders are participating. Women have traditionally played important roles in the agricultural production sector. Trees being part of this production process, are managed and used by the females. Women are generally considered more caring in the process of lookafter. The activities and needs of female gender are usually not taken into account in the development of agroforestry systems.

Social system in the study area restricts contact with women, especially when the project has only male staff. It is, therefore, suggested that trained women extensionists be involved in agroforestry development programmes, so as to get active participation and feed back from women under present social setup. Well-trained and skilled female professionals should be incorporated on all levels of the social forestry project as traditions and customs do not permit male staff to work with village women. Thus female staff can play a major role in identifying and addressing the needs of rural women.

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