Indian J. Dryland Agric. Res. & Dev. 2014 29(1) : 107-109

Short Communication

Contribution of Women to Henna Cultivation in Rajasthan

M.L. Meena and Aishwarya Dudi

Krishi Vigyan Kendra, Central Arid Zone Research Institute (CAZRI), Pali-Marwar-306 401, Rajasthan

Email: moti2007m@yahoo.co.in

In agriculture, women are active partners in all operations sharing work between 20-80% in certain cases and almost 100% especially in arduous repetitive work (Singh *et al*. 2013). Gender issues assume great importance in Indian agricultural scenario keeping in view that large diversity exists in the status of women which is influenced mostly by social and religious taboos, economic status and farm production systems. Henna can be grown on a wide variety of soil and climatic conditions. Henna is cultivated in about 44000 ha area in the form of field, hedges on bunds and as ornamentals in the gardens in India. Out of this Pali district of Rajasthan occupies around 39800 ha area (Anon., 2012). In 2003-04 trade of henna leaves was 19430 tons which doubled in 2011-12 (38431 tones) with a significant annual compound growth rate of 9.8% (Chand, 2012). Women play a major role in henna farming but we do not know enough about what this means for technology development, adoption and further impact on productivity. Hence, issues relating to both research coverage and impact in terms of gender need careful study. Therefore, the present study was undertaken with specific objective to assess the extent of participation of men and women in different henna farming operations.

The study was conducted in Pali district of Rajasthan. Three blocks namely Sojat, Raipur and Marwar Junction were selected purposively based on extent of area under henna cultivation. The list of all villages was obtained from each block on the basis of cultivable area of henna and a total of 12 villages were selected (Suraita, Chandawal, Sandia, Pipalia Kallan, Pratapura, Bar, Kusalpura, Rabariawas, Nimaz, Denda, Nayagoa and Jhutha). A complete list of henna growing farmers from selected villages was prepared with the help of village level workers. From the above selected villages, 20 farm women were selected from each village, comprising 240 respondents finally selected by random sampling technique. Personal interview technique was used for data collection. The responses were tabulated and the data were analyzed using simple percentage analysis.

Extent of participation of men and women in different henna farming operations

In the study area, henna farming is being done both by men and women, their participation levels differing in various activities (Table 1). Henna farming operations like ploughing, spraying herbicide, cleaning irrigation channels, earthing up, spraying plant protection chemicals and off barring were done exclusively by men. These activities are laborious and cumbersome and hence men generally carryout these operation. Activities like spreading plants in the field, planting and covering, hand weeding and threshing were done exclusively by farm women. These activities are also laborious but do not demand physical energy as required by the activities done by men. In all the other activities, there existed a wide variation among the study blocks.

In Sojat block, activities like wood cutting, top dressing of fertilizers and transporting of harvested leaves were performed by both men and women. Activities like farmyard manure (FYM) application, cutting treatment, supply of water for mixing plant protection chemicals, detopping the harvested leaves, cleaning the leaves, bundling of woods, collection of trash and trash disposal were women dominated activities with less than 20% of men doing such activities. However, activities like irrigating the crop, mixing plant protection chemicals for spraying, and harvesting the henna were male dominated activities with meager participation by women.

In Raipur block, fertilizer application was done by both men and women in almost equal proportions. FYM application, seed treatment, transplanting, supply of water, collection of harvested plants, cleaning the leaves, bundling, collection of trash and its disposal were women dominated activities. In Marwar Junction, both women and men participate equally in activities like application of super phosphate as basal, irrigating the crop and harvesting henna. Women in this block were found to participate in strenuous activities as well. The other operations in which women participate to a greater extent were FYM application, planting, dry leaves transport, top dressing, drying the harvested leaves, cleaning the leaves, bundling, transporting the henna leaves, collection of trash and its disposal. Most of the activities being performed by women could very well be performed by men as well; but the deciding factor here was the difference in wages paid. On an average, the men labourer was paid ₹ 80-100/day whereas for women labourers it was ₹ 60-80/day during peak harvesting time for the same work duration. This wide wage disparity does not compensate for the energy demand. However, practices like application of bio-fertilizer, propping, stubble shaving and raising of seedlings were not in vogue in the study sample. The findings confirm with those findings of Prasad *et al*. (2006), Chayal and Dhaka (2010), Pandey *et al.* (2011).

Time utilization pattern of farm women

On an average, a farm woman spends 7.3 h doing work in the farm in the case of paid labour with 45 minutes to one hour break in between. Most of the families own farm animals like cow, goat, sheep, etc. and nearly 77% of the respondents said that rearing of such animals was the responsibility of women. They spend 1.3-2.0 h/day for this activity. Regarding water fetching, the farm women reported that they spend hardly an hour for drawing water from the open wells or nearby community ponds. With better access to water in almost all the villages, they felt that

Table 1 : Extent of participation (%) of men and women in different henna farming operations (N=240)

Activity	Sojat		Raipur		Marwar Junction	
	Men	Women	Men	Women	Men	Women
Land preparation						
Ploughing	100.0	-	100.0	-	100.0	-
FYM application	22.9	77.1	10.0	90.0	25.1	74.9
Forming ridges and furrows	89.0	11.0	74.4	25.6	80.3	19.7
Planting						
Seedling treatment	65.0	35.0	18.6	81.3	85.4	14.6
Nursery bed treatment	25.0	75.0	80.0	20.0	07.7	92.3
Seedling transportation	23.5	76.5	15.3	84.7	-	100.0
Transplanting	05.0	95.0	-	100.0	-	100.0
Weed management						
Herbicide spray	100.0	-	100.0	-	100.0	-
Hand weeding	-	100.0	-	100.0	-	100.0
Fertilizer application						
Gypsum application	68.3	31.7	45.1	54.9	50.0	50.0
Top dressing	40.1	59.9	55.2	44.8	36.0	64.0
Irrigation						
Irrigation to crop	92.9	07.1	40.0	60.0	88.8	11.3
Cleaning channels	100.0	-	100.0	-	100.0	-
Earthing up	-	100.0	-	100.0	-	100.0
Plant protection						
Supply of water	8.0	92.0	-	100.0	12.0	88.0
Mixing of pesticides	80.0	20.0	85.0	15.0	13.2	86.8
Pesticide spray	100.0	-	100.0	-	100.0	-
Rogning affected clumps	90.0	10.0	06.0	94.0	95.0	05.0
Harvesting						
Cutting the plants	23.9	76.1	05.0	95.0	-	100.0
Leaf drying	-	100.0	-	100.0	-	100.0
Leaf removal	15.1	84.9	24.6	75.5	20.7	79.3
Cleaning the dry leaves	-	100.0	-	100.0	21.0	79.0
Transporting the leaves	100.0	-	100.0	-	100.0	-

the time spent in fetching water has been reduced considerably in recent times. Most of the women interviewed were of middle age and have crossed the child bearing age; thereby the time spent on child care was 2 h or even less. However, women spend a considerable time of nearly 4.3 h at home in cooking and other household work. But for the gas stove, the other amenities available in the urban households are yet to penetrate into the rural areas. The time they spent for themselves was hardly 30 minutes a day which is far less than their counterparts in the urban setting.

Decision making pattern of farm women

Among the henna farming operations, in activities like type of labour to be engaged, fixing rate for henna powder industries and deciding the market for selling powder, the decision was taken either by men themselves or jointly in consultation with their wives or sometimes elders (Table 2). For all the other activities like crops to be grown, area allotment for the selected crops, selection of variety, area allotment for different varieties, place of procuring seedlings, time of planting, fertilizer procuring, plant protection measures, time of harvesting and hiring of labourers, the decisions are taken mostly by men. However, the scenario was different regarding money management. Women had a better say in keeping and spending money, capital transactions, disposal of home/farm/other products, and savings. Nevertheless, men dominated in activities like borrowing of loans and maintaining accounts, as these could be attributed to their high social interaction and thereby better exposure. On the whole, it could be seen that women were not considered in the forefront when it came to decision making. But for money management, their participation in decision making was as such limited. The findings confirm with those findings of Prasad *et al*. (2006), Mishra and Dubey (2009), Shanthy (2010), Babu *et al.* (2010), Pandey *et al*. (2011).

Table 2 : Decision making pattern (%) of henna farmers (N=240)

Item	Men	Women	Jointly
Crops to be grown	65.8	11.0	23.2
Area allotment for the selected crops	87.0	04.3	08.7
Selection of varieties	84.4	03.1	12.4
Area allotment for different varieties	83.5	04.3	12.1
Place of procuring seedlings	90.0	05.0	05.0
Time of transplanting	60.3	04.4	35.2
FYM application	87.3	02.5	10.2
Fertilizer procurement	89.6	05.1	05.4
Plant protection measures	72.0	06.4	21.6
Time of harvesting	25.0	45.0	30.0
Labour management	54.2	07.1	38.8
Marketing of henna	90.2	04.2	05.6
Money management			
Saving and spending	35.0	36.0	29.0
Capital transaction (buying and selling)	57.0	10.2	32.8
Disposal of home/farm/other products	33.9	14.1	52.0
Borrowing of loans	80.1	07.9	12.0
Savings	32.1	54.2	13.7
Maintaining accounts	80.7	10.0	29.4

Drudgeries faced by women engaged in henna farming

With many non-agricultural avenues like brick kilns, tailoring institutes, spinning mills, food processing units and the like, women belonging to young and middle age group prefered getting employed in such activities as they get more wages and better working environments. This reality drives agriculture with no choice except having women of middle age and above to perform different operations in the field. In henna farming, removing of leaves from plant and hand weeding are reported to be very tedious operations. Some henna varieties are not self-shedding making manual labour more difficult. The situation gets worse in fields affected with pests like semilooper, aphid, termite *etc*. as it leads to skin irritation.

The study indicated that the farm women are engaged in activities like transplanting, weeding, removing of leaves and to a lesser extent in fertilizer application. This gives the farm women a lean period of about six months till harvest. This lean season can be productively utilized by providing them with job opportunities in other non-agricultural activities. Based on the locally available resources and considering the local demands, agro-processing units can be started to keep women fully employed. Also, there exists a wide wage disparity, which has to be bridged considering the energy demands and time consumed for each activity. Such developmental activities have to be designed locally and implemented through the concerned development departments in the area.

References

Anonymous. 2012. Vital Agricultural Statistics, Govt. of Rajasthan, Krishi Bhawan, Jaipur: 24.

Babu SH, Zargar AB, Ganaie SA, Yousuf S and Sehr H. 2010. Gender participation in vegetable cultivation in Kashmir Valley. Indian Research Journal of Extension Education, 10(2): 66-69.

Chand K. 2012. Economic scrutiny of henna cultivation. Improvement and trade, Central Arid Zone Research Institute, Jodhpur: 55-56.

Chayal K and Dhaka BL. 2010. Analysis of role performance of women in farm activities. Indian Research Journal of Extension Education, 10(2): 109-111.

Mishra A and Dubey AK. 2009. Participation of rural women in decision making. Indian Research Journal of Extension Education, 9(3): 23-25.

Pandey S, Meena BS, Sharma P and Dwivedi RN. 2011. Gender involvement in decision macking of On Farm and Off Farm activities. Journal Community and Sustainable Development, 6(1): 042-045.

Prasad A, Singh NN and Chanu TM. 2006. Factors associated with the decision making behavior of farm women. Indian Journal of Extension Education, 42(3&4): 41-46.

Shanthy TR. 2010. Gender perspectives for sustaining sugarcane based farming system. Indian Research Journal of Extension Education, 10(1): 112-116.

Singh D, Meena ML, Chaudhary MK and Tmer PK. 2013. Farm women participation in cumin production under arid condition of western Rajasthan. Indian Journal of Dryland Agricultural Research and Development, 28(1): 101-103.

Received: August 2013; Accepted: January 2014