Profile of women in cashew farm and processing sector and their constraints at workplace- a case study

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Received: 07.05.2021/Accepted: 18.05.2021

ABSTRACT

A cross sectional analysis of farm women in various activities related to cashew production and processing was conducted at Cashew Research Station (KAU), Madakkathara, Kerala. Among the total workers 68.88 per cent were women workers and 77.40 per cent of them were residing in the same village which made them to coordinate the farm and household activities in a better way. The women were involved in seasonal farm activities viz harvest and post-harvest handling (93.54%), grafting (67.74%), nursery operations and planting (87.09% each), weeding and fertilizer application activities (83.87%) and pruning and canopy management (74.19%). A few skilled groups were involved in cashew apple processing (22.58%) and nut processing (29.03%). More than half of the women workers (51.61%) were the sole earning members of the family. The threat of snake at farmland was identified as major constraint and needed to be addressed at policy level to get insured. Introduction of proper safety measures at farm level would also help to reduce the risk of wild animals in the remote farmlands. The seasonal nature of cashew farm sector was identified as another major constraint for farm women and hence diversified income generation activities needed to be taken up for assuring year-round employment.

Keywords: Cashew; farm women; profile; socio-economic status; constraints

INTRODUCTION

Cashew is grown extensively throughout Kerala particularly in northern Kerala. Cashew processing is a labour-intensive industry and provides employment to more than 5 lakh people in farms and factories, most of them in the rural areas. In the cashew processing factories, over 95 per cent of the workers are women from the lowest strata of the society, mainly belonging to the socially and economically backward communities (Kumar 2018). Thus apart from its economic significance, the cashew industry has the potential to play a leading role in social and financial upliftment of the rural poor. Cashew cultivation and processing is generally recognized as effective poverty alleviation measure in less developed and developing countries.

Cashew Research Station, Madakkathara, Kerala has pioneered in cashew nursery and cashew apple processing sector as early as in 1973 with its inception. The station is involved in commercial production of cashew nut and cashew apple processing

apart from the mandatory experimental activities. The station provided 8,359 man days during 2019 in various income generation activities. The present study was aimed at documenting the profile of women workers and to analyze the major constraints faced by them in workplace.

METHODOLOGY

The study was conducted at Cashew Research Station, Madakkathara, Kerala. The information on role of women workers in various activities of the station was collected through structured questionnaire. The women workers involved in farm activities were surveyed for socio-economic status and their major constraints at the workplace were assessed.

The respondents comprised the total women workers of the farm. The data were collected based on pre-tested questionnaire. The socio-economic variables such as age, educational qualification, family size, experience in farm activities, involvement or skill in specialized activities viz grafting, fertilizer application, cashew apple processing etc were also collected.

The constraints in work place were measured on a five-point continuum scale of very severe, quite severe, severe, not so severe and least severe with score of 5, 4, 3, 2 and 1 respectively. For identifying the constraints, relevancy ranking technique was used with the following formula (Prabhakar et al (2017):

Total score of all the respondents for ith constraint

Relevancy coefficient for the i^{th} constraint (RC_i)=

Maximum on the continuum x Total number of respondents

The constraint having the highest relevancy coefficient was ranked 1st and the other ranks were given according to the scores obtained in the descending order.

RESULTS and DISCUSSION

Profile of women workers at the cashew farm

The Cashew Research Station, Madakkathara, Kerala having a farm area of 90 acres with the strength of experienced workers, undertakes various income generation activities apart from the routine management of the farm. Out of the total workers, 68.88 per cent of the workers were women and their role in various farm activities are shown in Table 1.

Majority of the women workers (93.54%) were engaged in collecting the raw nut and its primary

Table 1. Role of women in cashew farm activities (n=31)

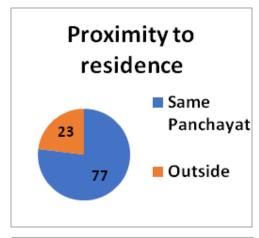
Activity	Resp	
	Frequency	Percentage
Cashew grafting	21	67.74
Nursery operations	27	87.09
Planting and aftercare	27	87.09
Fertilizer application in plantation	26	83.87
Farm level sickle weeding	26	83.87
Farm level mechanized weeding	0	0
Assisting in pesticide application at the farm	25	80.64
Pruning and canopy management	23	74.19
Harvest and post-harvest handling	29	93.54
Cashew apple value	7	22.58
Cashew nut processing	9	29.03

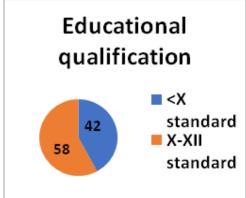
Multiple responses

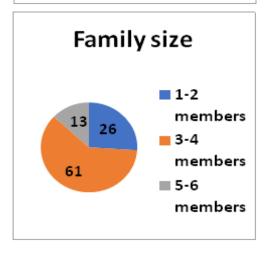
processing. The grafting activities were being undertaken mainly by skilled women workers. The women workers acquainted special skill in grafting and 67.74 per cent of them had the job role of grafting (Table 1). The successful production of cashew grafts of hybrids was possible because of a well-established nursery and skilled laborers. Cashew graft production was mainly done during May-August and the nursery could be managed by 87.09 per cent of the women workers.

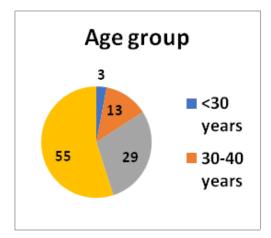
The station has evolved various technologies for cashew in Kerala since 1973. The crop improvement programmes of the station have led to the development of eleven high yielding varieties. These were being widely disseminated through vegetative propagation by adopting soft wood grafting technique which required skilled hands. The sale of cashew grafts was to the tune of one lakh per annum. The year-long production and supply of good quality grafts of cashew varieties has helped to cater to the needs of farming community and now the cultivation of cashew has even extended to non-traditional tracts of Kerala.

The farm management activities like fertilizer application and sickle weeding were done by 83.87 per cent each of women labour. None of them were specialized in mechanized weeding. The farm operations like pruning, canopy management and pesticide application, which require handling of minor equipments only, were also performed by the women group (74.19 and 80.64% respectively). Though the cashew harvesting season was about two to three months, the nut and apple processing activities lasted through the year and required skilled personnel. Technologies have been developed by the station for the economic utilization of cashew apple by processing into various value-added products. The station undertook advanced research for the development of new cashew apple products and also facilitated their production on commercial scale. Cashew apple syrup, candy, jam, pickle, carbonated juice and ready to serve drinks are the major cashew apple products produced











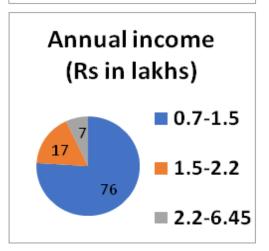


Fig 1. Socio-economic status of women workers in cashew farm (n=31)

from this centre. The dexterities of the women group had paved the way for the flagship programme of the unit which later helped to diffuse the technology to all over India. The activities of the cashew apple processing unit were performed by 22.58 per cent of labourers whereas 29.03 per cent of the women employees were involved in various activities of nut processing starting from cutting the nuts to grading and packaging. The effectiveness of gender role was more

pronounced in grafting and processing sector than in farm operations where the male workers were not engaged at all. Farid et al (2009) discussed the major role of women in farming activities especially in post-harvest operations and observed that they play a key role in the survival of millions of families.

At the station, men were paid equally and were engaged in many heavy works and operating farm

equipment and small machineries. The Table 1 also highlights the fact that the involvement of women workers in operating farm machineries and heavy equipments was negligible. Cashew industry is generally regarded as women work since it requires patience. However in Mozambique, the cashew farm activities were dominated by men (Kanji 2004). Study conducted by Enwelu et al (2013) in the state of Eugo in Nigeria showed the prevalence of women workers in cashew nut processing industry. In Ghana also women earned substantially higher income from cashew industry (Ingram et al 2015).

Socio-economic status of farm women

The cashew farm and processing activities of the station were dominated by females offering income, leadership and decision-making power in the society. The socio-economic status of women workers in cashew farm is depicted in Fig 1. More than 75 per cent farm women were the residents of the same village as that of the station which helped them to coordinate the farm and household activities in a better way. The age of greater proportion of the workers (54.83%) was between 50 to 60 years. The half of the labourers were in their active stage and hence were energetic to carry out cashew production, management and processing activities. The number of years of experience of the women respondents in cashew sector was considered as farming experience and above half of the workers (58.06%) were having an average experience of 20-25 years. Shinde et al (2000) found that majority of the respondents had farming experience of above 20 years.

The respondents were not fairly educated with an average educational qualification below 10th standard which was low in a state of Kerala with more than 93 per cent literacy rate. Many of them were from financially backward families where their higher studies might have hindered and were forced to take the burden of family. The average household size was 3 to 4 (61.29%) with 51.61 per cent of the workers as sole earners of the family. The nuclear type family of the female workers with small size influenced the respondents to continue in the farm activities at lower wages. Globally women constitute half of the world's population and produce half of the agricultural products which indicates the contribution of women in the economic prosperity of the nations (Sunitha et al 2018). The primary need of women working in various agricultural activities is to meet the family needs and to enhance the family income.

Family income supports the overall economic stability of family. A low level of family income compels oneself to work more to earn more. It is an important factor in participation of farm women in farm and allied activities. The data in Fig 1 show that more than 75 per cent of the respondents belonged to medium annual income category having annual income in the range of Rs 70,000 to 1,50,000 while only 6.45 per cent had high annual income above Rs 2,20,000 and 16.12 per cent respondents had annual income in the range of Rs 1,50,000 to 2,20,000. The results of the study are supported by the findings of previous research studies conducted by Rashekar (1998), Bhosle (2000) and Girade and Shambarkhar (2012) who found that majority of women respondents were in the medium annual income category. Lack of job opportunities made them accept low wages considering the family and social issues but the reputation obtained from the society and the decent work in a public sector organization might lead them engage in farm activities. Even though cashew-based sector contributes in many ways for livelihood as being a high value export-oriented agri-business sector, the seasonal engagement of labour might have a great impact on the annual income of the workers.

Constraints faced by the women labourers at work place

The constraints at work place were ranked by relevance ranking technique and are presented in Table 2. The threat of snake at work place (rank 1), seasonal nature of work (rank 2), operation of heavy farm machineries (rank 3), working in remote and isolated farmland (rank 4) and threat of wild animals (rank 5) were identified as major constraints faced by the women workers. The cashew plantation is generally in a remote and isolated land which hinders the solitary movement of workers. The risk of snake and wild animals are also high in this situation. Hence government policies are to be formulated for covering the farm women in plantation sector under insurance scheme. The farm regulations need to be revamped for offering gum boots, personal safeguard accessories and introducing proper dress code to seasonal workers.

The seasonal nature of the crop forced an overall reduction in working days which was a key expressed concern of women workers. Hence diversified income generation activities were required to upsurge year-round activities of farm especially value addition. An organized nature of work was required to sustain skilled workers at the farm. So new

Table 2. Constraints faced by the women labourers at workplace

Constraint	Score	Relevancy coefficient	Rank
Remote and isolated	79	0.50	5
farmland			
Threat of wild animals	68	0.43	5
Threat of snakes	124	0.80	1
Seasonal works	113	0.72	2
Lack of awareness of	54	0.34	7
technologies			
Personal health issues	67	0.43	6
Operating heavy farm	87	0.56	3
machinery /equipment			
Health issues at workplace	53	0.34	8

vistas are to be identified at farm level for income generation and accelerated production. The women force under the age group of 50 years should be empowered for handling small farm machineries to join hands in the advancement of small farm mechanization.

CONCLUSION

It was concluded from the study that women workers (68.8 %) were dominated in the income generation activities of Cashew Research Station with 51.61 per cent of women serving as the sole earning members of family. The seasonal works reduced the work security of women and hence it was difficult to get high quality workers. So diversified activities were needed to be undertaken to sustain the skilled workers at the farm. The study highlights the challenges of women workers in isolated farm activities with threat of poisonous snakes and wild animals and was to be addressed at government level to get insurance policies and to introduce safety measures at workplace. The women workforce was needed to be empowered for the latest technological advancements including small farm machineries which may bring more employment opportunities even during off-season.

ACKNOWLEDGEMENT

The authors are thankful to the workers of Cashew Research Station, Madakkathara, Kerala for delivering sincere data for analysis. The authors also express their sincere gratitude to Kerala Agricultural University and AICRP- Cashew under Indian Council of Agricultural Research for facilitating this study.

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