



## Socio-personal Profile of APMC Women Involved in Post-harvest Activities of Dry Chilli and their Constraints – A Comparative study

Bojjagani Jhansi<sup>1</sup> and Annapurna N. Kalal<sup>2</sup>

1. Rese. Scholar, 2. Profe., Department of Extension and Communication Management, College of Community Science, UAS, Dharwad, Karnatak, India

Corresponding author e-mail : [jhansibrp@gmail.com](mailto:jhansibrp@gmail.com)

### ABSTRACT

*A comparative study to know the socio-personal profile, constraints and health problems of APMC women involved in post-harvest activities of dry chilli was undertaken during 2019-2020 in Byadgi APMC of Karnataka and Guntur APMC of Andhra Pradesh with a sample of 120 women labourers. The results showed that, 63.33 per cent of Byadgi APMC and 70.00 per cent of Guntur APMC respondents belonged to middle aged (36-50) category. More than half (53.33 %) of Byadgi APMC and 63.33 per cent of Guntur APMC women labourers were illiterates. Most of Byadgi APMC (70.00%) and Guntur APMC (86.67%) women labourers belonged to small family size. The family income was medium for 73.33 per cent of Byadgi APMC and 60.00 per cent for Guntur APMC women labourers. More than half (53.33%) of Byadgi APMC and (26.67%) of Guntur APMC respondents belonged to backward castes. Remaining belonged to SC/ST and forward castes. They had low extension, organizational and mass media participation. Social participation was medium. The women labourers faced many constraints while performing post-harvest activities at APMC as APMC is far away to reach by 93.33 per cent of Byadgi APMC and 90.00 per cent Guntur APMC women labourers. Similarly 93.33 per cent of Byadgi APMC and 76.66 per cent of Guntur APMC respondents said less wages as a constraint. More than 70.00 per cent told high cost of transportation to reach APMC as a constraint. More than 70.00 percent of respondents said joint pain, whole body ache, hand pain and back ache followed by 65.00 percent told eye burning were the health problems faced by them while performing post-harvest activities of dry chilli in the APMCs.*

**Key words:** Post-harvest activities; APMC; Dry chilli; Women constraints.

**D**emographically, agriculture is the largest economic field and plays a significant role in India's entire socio-economic structure. Women's role and contribution is no longer a matter of contention because in rural India the percentage of women who depend for their livelihood on agriculture and allied activities is more than 80.00 per cent. In majority of the developing nations including India women play a vital role in post-harvest activities which varies with the different crops and regions. They play numerous intensive jobs in post-harvesting operations especially in threshing, dehusking, cleaning, drying, storage, grading, processing and marketing as reported by Sidhu, (2007). Thus women are the key contributors in production and post-production activities of various crops across the countries and globe.

*Dry chilli production in Andhra Pradesh and Karnataka* : Chilli is one of India's most popular

commercial crops and it is being cultivated in almost all states and in union territories. Andhra Pradesh stands first and Karnataka stands second in position in area of chilli cultivation. These two states together contribute 14.00 per cent of the country's production (Patil and Nagnur 2015). Andhra Pradesh is known for its spicy Guntur chilli which exports premium quality chilli and is in a high demand around the world for its extreme spiciness. The main trading place for Guntur chilli is called "Guntur Mirchi Yard" (Guntur APMC) in Andhra Pradesh which is Asia's largest dried red chilli market. Byadgi chilli of Karnataka is equally famous as that of Guntur but this variety is prized for its colour rather than spiciness. Karnataka's Byadgi APMC is also famous for premium export quality chilli. Byadgi chilli market (Byadgi APMC) is the hub for the less spicy and red coloured Byadgi variety of chilli in Haveri district. Both these chillies

have been assigned the geographical indication tags. Guntur chilli is registered as under Registration and Protection Act, 1999. Byadgi chilli has been accorded Geographical Indication in February 2011. Both these markets are vibrant and chilli yards are full of activities especially those dealing with post-harvest activities both at field level and at the chilli markets (APMCs).

*Women in chilli post-harvesting*: Women perform chilli cultivation activities such as, sowing/ transplanting to harvesting and various post-harvest activities such as picking, grading, drying, packing etc., Women at APMC do cleaning, drying till it reaches the desired moisture content, packing, storing, marketing etc.,. Studies have shown that women need to be equipped with knowledge (Patil and Nagnur, 2015) for better work efficiency and safety.

Andhra Pradesh is known for its spicy Guntur chilli which exports premium quality chilli and is in a high demand around the world for its extreme spiciness. Byadgi chilli of Karnataka is equally famous as that of Guntur but this variety is prized for its colour rather than spiciness. Women play multiple roles in production and post-production activities of dry chilli. Both the dry chillis are high in demand across the globe. However the socio-personal profile and constraints faced by them while performing various activities in agriculture were ignored. Hence an effort was made to study socio-personal profile, constraints and health problems faced by APMC women involved in post-harvest activities of dry chilli were studied with following objectives.

- i. To study the socio-personal profile of women labourers doing post-harvest activities of dry chilli at APMCs
- ii. To study the constraints and health problems of women labourers doing post-harvest activities of dry chilli at APMCs
- iii. To study relationship between APMC women socio-personal characteristics and knowledge

## METHODOLOGY

The present study was conducted in Haveri district of Karnataka and Guntur district of Andhra Pradesh. For this study two APMCs namely Byadgi APMC from Haveri district of Karnataka and Guntur APMC from Guntur district of Andhra Pradesh were selected. From each APMC 60 women labourers involved in post-harvest activities of dry chilli at

APMCs were randomly selected. Thus a total of 120 APMC women labourers were selected for the study (60 respondents from Karnataka, Byadgi APMC and 60 respondents from Andhra Pradesh, Guntur APMC). The data was collected through personal interview method with the help of pre-structured interview schedule. The data is presented in terms of frequency, percentages and relationship between the socio-personal characteristics with knowledge of APMC women labourers.

## RESULTS AND DISCUSSION

The details of socio-personal profile of women involved in post-harvest activities of dry chilli are presented in Table 1.

*Age*: The age category of the women involved in post-harvest activities of dry chilli revealed that 63.33 per cent of the Byadgi APMC and 70.00 per cent of Guntur APMC respondents belonged to middle age. Very few (16.67 %) of Byadgi APMC and 20.00 per cent of Guntur APMC women labourers belonged to old age category. Remaining belonged to young aged category in both the districts respectively. The reasons attributed to this finding are, in villages women get married at an early age and by 35 years their children are grown. Middle aged women will be free from household responsibilities as their children are grown up. These women can divert themselves towards income generating activities. In rural areas unmarried women do not go out to work till they get married. These reasons could have resulted in more involvement of middle aged and very few young aged women in post-harvest activities of dry chilli. Similar results were reported by *Santhi and Kalirajan (2019)*, *Kumari et al. (2022)* indicated that majority of the respondents belonged to middle age group.

*Caste*: More than half (53.33%) of the Byadgi APMC and 26.67 per cent of Guntur APMC respondents belonged to other backward caste. One third (36.67%) and 20.00 per cent belonged to schedule caste in both the districts respectively and 10.00 per cent of Byadgi APMC and 36.67 per cent of Guntur APMC labourers belonged to schedule tribe. Very few (16.67%) of them from Guntur APMC labourers belonged to forward caste.

In terms of caste both the districts displayed variations for APMC women labourers. In Byadgi APMC backward caste women were in more in number as compared to scheduled tribe in Guntur

**Table 1. Socio-personal profile of women involved in post-harvest activities of dry chilli in APMCs (N=120)**

Variables	Categories	Byadgi APMC (n <sub>1</sub> =60)	Guntur APMC (n <sub>2</sub> =60)	Total (N=120)
		No. (%)	No. (%)	No. (%)
<i>Age</i>	Young (18 – 35 years)	12 (20.00)	06 (10.00)	18 (15.00)
	Middle (36 – 50 years)	38 (63.33)	42 (70.00)	80 (66.67)
	Old (51 years and above)	10 (16.67)	12 (20.00)	22 (18.33)
<i>Caste</i>	Forward caste	-	10 (16.66)	10 (08.33)
	Other Backward Caste	32 (53.33)	16 (26.67)	48 (40.00)
	SC	22 (36.67)	12 (20.00)	34 (28.33)
	ST	06 (10.00)	22 (36.67)	28 (23.33)
<i>Education</i>	Illiterate (0)	32 (64.00)	38 (63.33)	70 (58.33)
	Primary (class 1-4)	18 (30.00)	12 (20.00)	30 (25.00)
	Middle school (class 5 – 7)	10 (16.67)	04 (06.67)	14 (11.67)
<i>Family type</i>	High school (class 8 -10)	-	06 (10.00)	06 (05.00)
	Nuclear	48 (80.00)	60 (100)	108 (90.00)
	Joint	12 (20.00)	-	12 (10.00)
<i>Family size</i>	Small (1 – 4 member)	42 (70.00)	52 (86.67)	98 (81.67)
	Medium (5 – 8 members)	14 (23.33)	08 (13.33)	22 (18.33)
	Large (9 & above)	04 (06.67)	-	04 (03.33)
<i>Annual income</i>	Low up to Rs. 1,32,000	16 (26.67)	24 (40.00)	40 (33.33)
	Medium (Rs. 1,32,000 - Rs. 5,72,000)	44 (73.33)	36 (60.00)	80 (66.67)
<i>*Family occupation</i>	Agriculture	*04(06.66)	*06(10.00)	*10(08.33)
	Animal husbandry	*16(26.66)	*04(06.66)	*20(16.66)
	Wage labour	60 (100)	60 (100)	120 (100)
	Others	*12(20.00)	*22(36.66)	*34 (28.33)
<i>Marital Status</i>	Married	56 (93.33)	52 (86.67)	108 (90.00)
	Widow	04 (06.67)	08 (13.33)	12 (10.00)
<i>Land holding</i>	Landless/ No land	60 (100)	54 (90.00)	114 (95.00)
	Marginal farmers (<2.5 acres of dry land)	-	06 (10.00)	06 (05.00)
<i>Extension participation</i>	Low (0-6)	60 (100)	60 (100)	120 (100)
<i>Mass media participation</i>	Low (1-6)	54 (90.00)	48 (80.00)	102 (81.00)
	Medium (7-12)	06 (10.00)	12 (20.00)	18 (15.00)
	High (13-18)	-	-	-
<i>Extension contacts</i>	Low (1-8)	60 (100)	60 (100)	120 (100)
	Low (1-5)	10 (16.66)	08 (13.33)	18 (15.00)
<i>Social participation</i>	Medium (6-10)	28 (46.67)	32 (53.33)	60 (50.00)
	High (11-15)	22 (36.67)	20 (33.33)	42 (35.00)
<i>Organizational participation</i>	Low (1-7)	60 (100)	60 (100)	120 (100)

Note: \*Multiple responses are possible

APMC. In Byadgi APMC, more number of women labourers belonged to Ambiga (Fishing community), Kambar (Pot makers), Maratha community and Nekar community (Weavers community) which are listed in other backward community. The district profile of the Haveri district also shows that more number of families belonged to other backward communities. Whereas, in Guntur district, scheduled tribes and scheduled castes like Yerekula and Koya (Make baskets, mats and other products from bamboo), Chenchu and Yanadi (Collecting forest products) also scheduled castes viz, Madiga (do leather works) and Mala (Weavers community) are more in number in the study area. The district profile of the Guntur district also shows that more number of families belonged to scheduled tribes and scheduled castes. Moreover, these families are shifting from their caste-based family occupations to labour activities as their family occupations are declining day by day. Therefore, they are working as labourers in nearby APMCs. The above mentioned findings were in consonance with the findings of *Chamandeep (2017)*, who found in his study that most of the women labourers involved in maize post-harvest activities belonged to other backward castes.

**Education :** The education profile of APMC women labourers in post-harvest activities of dry chilli showed that more than half (53.33%) of the Byadgi APMC women labourers were illiterates, 30.00 per cent were educated up to primary school and 16.67 per cent studied up to middle school. Similarly in Guntur APMC more than half (63.33%) of the women labourers were illiterates. Very few (20.00%) educated up to primary school and 10.00 per cent educated up to high school followed by middle school (06.67%). Therefore, it is clear from the above details that, in both the APMCs most of the women labourers involved in post-harvest activities of dry chilli were illiterates.

The possible reasons could be that, most of the APMC women labourers are from low socio-economic status in their villages. Gender bias in educating girls might be the other reason as parents hesitate to send their daughters to school and involve themselves in household work and to take care of siblings. Other contributing factors may be lack of desire, lack of family support and lack of awareness about importance of education. All of these factors might

have contributed for the majority of the respondents as illiterates. The findings are in consistent with *Hada and Bansal (2017)* and *Chamandeep (2017)*.

**Type of family :** Majority of women labourers from both the APMCs belonged to nuclear family (80.00 per cent from Byadgi APMC and 100.00 per cent from Guntur APMC) and very few 20.00 per cent belonged to joint family from Byadgi APMC. It is observed in both the APMCs that, women labourers at APMCs belonged to nuclear families. During earlier time people preferred to live in joint families. But trends are changing and families wish to be independent. The other reason may be migration of families in search of jobs. Another important reason could be the Government programmes which are beneficial to low income families, small and marginal holders. In order to avail the benefits, many families have fragmented. Hence, majority of labourers belonged nuclear families.

**Family size :** More than half (70.00%) of the Byadgi APMC and 86.67 per cent of Guntur APMC respondents belonged to small (1-4) family size. About 23.33 per cent and 13.33 per cent belonged to medium (5-8) family size from both the APMCs respectively. Very few (06.67%) of Byadgi APMC respondents belonged to large (9 and above) family size. Most of the respondents belonged to nuclear families with one or two children. The reasons explained earlier about more number of nuclear families holds good here also. Many people prefer living in nuclear families for the sake of safety and fulfilling of essential needs in a better way, which might have resulted in small family size in the present study.

**Annual Income :** The results from Table 1 indicated that, more than half (73.33%) of the Byadgi APMC respondents belonged to medium income (Rs. 1,32,000 - Rs. 5,72,000) category and 26.67 per cent of them belonged to low income (upto Rs.1, 32,000) category. In Guntur APMC more than half (60.00%) of them belonged to medium income (Rs. 1,32,000 - Rs. 5,72,000) category and 40.00 per cent belonged low income (upto Rs.1, 32,000) category. In both the APMCs most of the respondents belonged to medium income level category. None of them belonged to high income category.

Women labourers at APMCs separate stalks

of around 25-30 kgs of chillies in a day. They earn Rs.12 to Rs.15 for a kilogram of chilli. That makes for Rs. 250-300 per day. In addition the other family members are also involved in some income generating activities. While some were having agricultural land, animal husbandry, poultry etc, the other family members were working as auto drivers, vegetable sellers, wage labourers, cooking for marriages. As total income of all the family members was taken into consideration for the annual family income, majority of the respondents belonged to medium annual income category. This income helps them to lead a decent life.

*Family occupation* : The results in Table 1 revealed that, cent per cent of women from both the districts were labourers doing chilli post-harvest activities in APMC. The results in the study also indicated that 06.66 per cent of Byadgi APMC respondents had agriculture and 26.66 per cent involved in animal husbandry activities. Whereas in Guntur APMC, 10.00 per cent had agriculture and 06.66 per cent had animal husbandry apart from women working as APMC labourers in chilli post-harvesting activities.

Since agriculture is India's traditional occupation and backbone of country's economy. It is largest sector providing livelihood irrespective of land holding to many women especially in rural area. The respondent's family members were involved in other occupations such as auto drivers, vegetable sellers, wage labourers, cooking for marriages etc. This is because they do not have land and family-based occupations are declining due to globalization. Thus, the family occupation of the respondents was mainly as wage labourers. The findings were similar to *Santhi and Kalirajan (2019)*.

*Marital status* : It is seen in Table 1 that, large majority (93.33%) of Byadgi AMPC and 86.67 per cent of Guntur APMC respondents were married and remaining were widows. In this study, most of the women belonged to middle aged category. Generally during this age most of the women will be married. Due to age related problems many old aged women are widows. In villages, unmarried women generally do not go out to work before marriage. Hence the study has resulted that, all women respondents were married.

*Land holding* : It is clear from Table 1 that, cent per cent of Byadgi APMC and great majority (90.00%) of Guntur APMC women labourers had no land. Very few (10.00 %) of Guntur APMC respondents

belonged to marginal land holding. From the findings it was evident that greater proportion of the APMC labourers had no land. The reason could be that the APMCs are situated in town, where the residents not own. The findings of the present study were similar to *Hada and Bansal (2017)*.

*Extension participation* : The results from Table 1 indicated that cent per cent respondents belonged low extension participation category.

In the study it was found that, none of the respondents from both APMCs participated in any trainings, demonstrations, meetings, study tours, Krishi mela and exhibitions which has resulted in their extension participation being nil. The reason could be that most of the respondents belonged to landless category. So they might not have felt the necessity to participate in any extension activities. Lack of awareness about extension activities might be the other reason.

*Mass Media participation* : Table 1 shows the overall mass media participation of APMC labourers. It is clear from the table that great majority (90.00%) of Byadgi APMC and majority (80.00%) of Guntur APMC respondents had low mass media participation. Remaining respondents in both the districts belonged to medium level of mass media participation. Of all the mass media considered, it was seen that, television has become the best source of entertainment for women for relaxing after their domestic work. Most of the respondents had basic mobile phones for day today communication. But the usage of phone for other purposes like usage of social media and internet was nil as they had basic mobile sets. Since most APMC women labourers were illiterates, the usage of print media such as newspaper and magazines was practically nil. Hence the results in the study shows that majority of the APMC women labourers belonged to low mass media participation.

*Extension contact* : It is evident from the above results that, respondents in both the APMCs never contacted any extension worker other than Gram Sevaka in Byadgi APMC and Grama Sachivalayam Volunteer in Guntur APMC. It is clear from the table that cent per cent of the respondents from both the districts belonged to low extension participation.

Most of the APMC women labourers belonged to landless category and so they did not felt the need to contact extension workers. Other reason might be that, majority of the APMC women labourers were illiterates and not aware about the need to contact anyone. This might be the reason which resulted in

most of them with low extension contact. The findings were in line with the results of *Santhi and Kalirajan (2019)*.

*Social participation* : A little less than half (46.67%) of Byadgi APMC women labourers had medium level of social participation and 36.67 per cent had high social participation. In case of Guntur district respondents 53.33 per cent had medium social participation and 33.33 per cent belonged to high participation. Remaining belonged to low participation.

Social functions are a part and parcel of the Indian culture where, women more than men are active so if we see that, women participate in one or other function either in their family or outside their family. Women expressed that they participate in fairs and festivals which are in and around their villages. They also go to neighbours/friend's house during special occasions like marriages, naming ceremonies etc. Thus, majority of APMC women labourers belonged to medium social participation category.

*Organizational participation* : Cent per cent of the respondents participation on organizations was low. It is due to the fact that APMC women labourers were unorganized. They are being earning their livelihood and so they might not have felt the importance to be in organization. The other reason could be lack of education, time and consequently low self-esteem and confidence leading to hesitation to participate in organizations like panchayats, religious groups etc. However, few of the respondents were members of self-help groups like that of Shri Dharmasthala Manjunatheshwar Society and Navachaitanya in Byadgi APMC of Haveri district. Similarly in Guntur APMC of Guntur district, few women labourers were members in Development of Women and Children in

Rural Areas (DWACRA) and chit fund groups. This is mainly for saving money weakly/monthly basis. The findings were in confirmation with the findings of *Chamandeep (2017)* who found that majority of the women respondents had low organizational participation.

*Constraints faced by APMC women labourers* : The constraints faced by Byadgi APMC women labourers as shown in Table 2 are less wages and APMC is far way to reach to a great majority (93.33%) of the respondents. Majority (86.66%) of them said that no off seasonal jobs at APMC. High cost of transportation to reach APMC was the constraint for majority (76.66%) of the respondents. Unable to manage time between household work and APMC work as a constraint expressed by 60.00 per cent of respondents. A little less than half of the respondents (46.66%) expressed lack of support from government as a constraint. A little more than two third (36.66%) of them said that delay in payments by middlemen to labourers at APMC as a constraint. Malpractices in weight measurement to pay labourers money to the women worker as a constraint expressed by 06.66 and other constraints by 60.00 per cent such as difficulty while travelling *etc.,*.

The constraints faced by Guntur APMC women laborers are, no off seasonal jobs at APMC as expressed by great majority (93.33%) and APMC is far away for 90.00 per cent respondents. Majority (76.66%) of them expressed fewer wage as a constraint and 70.00 per cent said high cost of transportation to reach APMC. More than half (66.67%) of them expressed that they were unable to manage time between household work and APMC work. A little more than one third (36.66%) of them said poor incentives from

**Table 2. Constraints faced by APMC women labourers (N =120)**

Constraints	Byadgi APMC	Guntur APMC	Total (n=120)
	(n <sub>1</sub> =60)	(n <sub>2</sub> =60)	
	No. (%)	No. (%)	No. (%)
Less wages	56 (93.33)	46 (76.66)	102 (85.00)
No off-season job at APMC	52 (86.66)	56 (93.33)	108 (90.00)
Unable to manage time between household work and APMC work	36 (60.00)	40 (66.67)	76 (63.33)
High cost of transportation to reach APMC	46 (76.66)	42 (70.00)	88 (73.33)
Involvement of malpractices in weight measurement	04 (06.66)	10 (16.67)	14 (11.67)
APMC is far away to reach	56 (93.33)	54 (90.00)	110 (91.66)
Delay in payment by middlemen to workers at APMC	22 (36.66)	16 (26.66)	38 (31.66)
Any other	36 (60.00)	30 (50.00)	66 (55.00)

Note: \*Multiple responses are possible

government and 26.66 per cent said delay in payments by middlemen to labourers at APMC as a constraint. Malpractices in weight measurement to pay labour money to the women worker as a constraint expressed by 16.67 per cent and 50.00 per cent expressed other constraints such as difficulty while travelling and unable to take care of their children.

Women labourers expressed some constraints in dry chilli post-harvest activities. Prominent among them are as less wages at working place and no off seasonal jobs. Majority of APMC women labourers expressed the difficulty in managing time between household work and APMC work. Women are involved for more than 7 hours per day at APMC and after returning home in the evening they find it difficult to do household work. Often they have no electricity and drudgery reducing technologies. Most of the women expressed high cost of travel to reach APMC. It might be because APMC is far away and to reach APMC daily they walk 2-3 Kms on one side as reaching to work either in public or private vehicles is too costly for them i.e., Rs 30-40/- per day which is more for the labourers.

Some of the women labourers expressed delay in payment by middlemen. This is because of lack of monitoring activity at APMCs to check for timely distribution of labour charges to the workers. Many women expressed that they were not aware of government programmes. In India although many programmes have been implemented for upliftment of rural people, yet many people are not aware of these programmes because of illiteracy, low mass

media participation and low extension contact. The findings were in the line with the results reported by *Malek and Sisodia (2019)*, *Naik et al. (2019)*, *Kandpal (2022)* and *Dangore et al. (2015)*.

*Health problems faced by APMC women labourers while performing post-harvest activities of dry chilli* : The data presented in Table 3 indicated the health problems faced by Haveri APMC labourers during post-harvest activities. The major health problems faced are viz., hand pain (93.33%), back ache and whole-body ache (83.33%), joint pain (76.67%), eye burning (66.67%), respiratory problem and skin problems (50.00%), neck ache (40.00%), head ache (30.00%), fatigue (26.67%), and other problems like monthly menstrual problems, problems during pregnancy, over body heat (13.33%) etc.,

The health problems faced by Guntur APMC labourers during post-harvest activities are hand pain (83.33%), back ache (76.66%), whole body ache (73.33%), eye burning and joint pain (63.33%), respiratory problems (43.33%), neck ache (36.67%), skin problems (23.33%), head ache (20.00%), fatigue (16.67%) and other health problems expressed by 10.00 per cent of respondents.

The health problems were because of the activities that APMC women labourers daily performed. They were involved in separation of chilli stalks for 8-10 hours wherein, the pungency of the chilli irritates the skin, eyes causing sneeze. Many of them expressed that they have dark patches on the tips of their fingers and women expressed that the pain was unbearable. They cover them with a bandage when the pain is

**Table 3. Health problems faced by APMC women labourers (N= 120)**

Health problems	Byadgi APMC (n <sub>1</sub> =60)	Guntur APMC (n <sub>2</sub> =60)	Total (N=120)
	No. (%)	No. (%)	No. (%)
Whole Body ache	50 (83.33)	44 (73.33)	94 (78.33)
Hand pain	56 (93.33)	50 (83.33)	106 (88.33)
Joint pain	46 (76.67)	38 (63.33)	84 (70.00)
Respiratory problem	30 (50.00)	26 (43.33)	56 (46.66)
Skin problems	30 (50.00)	14 (23.33)	44 (36.66)
Back ache	50 (83.33)	46 (76.66)	96 (80.00)
Head ache	18 (30.00)	12 (20.00)	30 (25.00)
Neck ache	24 (40.00)	22 (36.67)	46 (38.33)
Fatigue	16 (26.67)	10 (16.67)	26 (21.66)
Eye burning	40 (66.67)	38 (63.33)	78 (65.00)
Others	08 (13.33)	06 (10.00)	14 (11.66)

Note: \*Multiple responses are possible

**Table 4. Correlation between the socio-personal characteristics with knowledge of APMC women labourers (N=120)**

Independent variables	Knowledge ('r value') of APMC women labourers	
	Byadgi APMC (n <sub>1</sub> =60)	Guntur APMC (n <sub>2</sub> =60)
Age	-0.108NS	0.161 <sup>NS</sup>
Education	0.375*	0.636**
Annual income	0.042NS	0.108 <sup>NS</sup>
Land holding	0.000NS	0.618**
Contact with extension agent	0.684**	0.765**
Social participation	0.798**	0.753**
Mass Media participation	0.823**	0.862**
Organizational participation	0.257NS	0.057 <sup>NS</sup>

\* - Significant at the 0.05 level    \*\* - Significant at the 0.01 level    NS-Non-significant

unbearable. This is again because of the capsaicin present in chilli. Travelling long distance to and from work in order to save transportation money and then they are sitting for long duration, some times in the hot sun causes fatigue and whole body pain. The poor nutritional status could also be a reason for them being tired. APMC women labourers work for 8-10 hours under the sun constantly to separate chilli stalk and other activities with chilli. This might be the main reason for skin problems, eye burning and respiratory problems. The findings were in the line with the results reported by *Patil et al. (2016)*.

Results from the Table 4 indicated that, age, annual income, organizational participation was non-significant with knowledge whereas, contact with extension agent, social participation, mass media participation was highly significant at 0.01% level in both Guntur and Byadgi APMCs respectively. With respect to education, in Byadgi APMC it was significant and non-significant in Guntur APMC. Whereas, land holding is non-significant in Byadgi APMC and highly significant with knowledge in Guntur APMC respectively.

## CONCLUSION

Majority of APMC women labourers belonged to middle aged category and illiterates. Most of the respondents from Byadgi APMC belonged to backward community families and in Guntur APMC most of them belonged to ST/SC. Majority of women labourers from both the APMCs belonged to nuclear family type with medium annual income. Most of the APMC women labourers were from small family size family. Cent per cent of the respondent's occupation

was wage labour at APMC and they were married. Majority of the APMC women labourers had no land. Cent per cent of the respondents had low extension participation, extension contact, organizational participation. Majority of women APMC labourers had low level of mass media participation and half of the respondents belonged to medium level of social participation. Great majority of respondents constraints was less wages and APMC is far away to reach followed by no off seasonal jobs at APMC. Great majority of respondents from both the APMCs said that joint pain, hand pain, whole body ache, back ache and eye burning as a major health problem while performing post-harvest activities.

## Implications:

1. The findings revealed that APMC women labourers participated in most of dry chilli post-harvest activities. Their extension contact is nil. Therefore, it is important to have more women extension agents to cater the needs of women labourers.
2. APMC women labourers belonged to low organizational participation category. So women labourers groups can be formulated for organized activities.
3. Majority of the respondents expressed that they were unable to manage time between household work and APMC work. As women labourers were involved in many post-harvest activities, policy makers should consider ways of providing programmes and technologies that minimize the amount of time and effort involved in domestic tasks and women can perform post-harvesting activities in a better way.

4. Majority women labourers expressed hand pain, joint pain, back ache, whole body ache as major health problems while doing post-harvest activities at APMC. Therefore, drudgery reducing technologies can be taken up for research to

reduce the burden of post-harvest activities and health problems.

### CONFLICTS OF INTEREST

The authors have no conflicts of interest.

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