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Impact of COVID-19 Pandemic on Retail Chicken Shop Owners (Butchers) and their Livelihoods

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Abstract

The degree of COVID-19 pandemic impact on retail chicken shops and butchers' livelihood were assessed in the present study. The data collected on 38 butchers from eight states through semi-structured interview schedule employing the cross-sectional study during first and second weeks of May, 2020. During the COVID lockdown period, 21.1 % butchers closed their shops due to low demand, COVID-19 panic and poor supply chain. Limited availability of birds leads to increased sale price by 29.9%, but the quantity of sale decreased considerably. Maximum and significant increment of chicken price was observed in rural (49.2%) followed by peri-urban areas (43.5%). During the period, butcher's earnings were significantly reduced by 55.6 % affecting the family income. The net loss was about ₹ 32.2/bird as the butchers could not utilize their resources to their potential. COVID-19 pandemic lead to reduced demand for chicken products leading to closure of shops, increased sale price, significant reduction in earnings resulting in distress to the families.

Keywords: Butchers, COVID-19, Chicken, Livelihood

Introduction

The Indian animal husbandry market was worth ₹ 900 billion in 2019 with sizable amount from poultry sector. Products from animal husbandry include chicken meat, eggs, carabeef (buffalo meat), mutton (sheep meat), chevon (goat meat), pork (pig meat), wool, animal skin etc. (imarc, 2020). The Indian poultry sector, today contributes ₹ 1.2 lakh crore to India's Gross Domestic Product (GDP), and is one of the major agriculture sectors providing employment and livelihoods, which produces 25 crore eggs and 1.3 crore birds per day (Sharma, 2020). The poultry sector is providing employment to about 6.5 million people, of which, 80 percent is by poultry farms and the rest by associated activities like feed, pharmaceutical, equipment sectors and other support services required for poultry (Sashidar and Murali, 2015).

Meat production is largely an unorganized, yet a vital segment of Indian agriculture. There are about 8000 registered, and more than 20,000 unregistered slaughter houses in the country (Suwal, 2019). Poultry meat is the cheapest source of animal protein, and is second most preferred/consumed meat after pork in the world (Le Behan-Duval, 2004), and is the first preferred meat in India with almost 50 percent (4.06 MMT) of the total meat production of the country (8.11 MMT) followed by buffalo meat (1.54 MMT) and goat (1.09 MMT) during 2019 (Statista, 2020). Meat selling through small retail shops is most common in India (Ranjhan and Rawat, 2011) with almost more than 95 percent wet market, wherein live birds are slaughtered for immediate consumption. However, the share of frozen value-added chicken products are slowly picking up in recent past. India is leading in the wet market share compared to other Asian and European countries. The consumer prefers freshly slaughtered chicken in local meat retail shops or butcher shops. Slaughtering poultry in organized slaughter houses is rare in India except few commercial units and institutions where, full-fledged dedicated poultry slaughter houses and processing units are available. Coronavirus disease (COVID-19) pandemic changed the consumption and purchase patterns of the consumers globally. The COVID-19 has impacted chicken wet market, and also the livelihoods of the small retailers and butchers in India. Present study was conducted to assess the degree of impact on small retail chicken shops operated by butchers across different regions of the country.

Materials and Methods

A cross-sectional study was conducted in first and second week of May, 2020 (01st -15th May 2019) amongst 38 retailors/ butchers from different part of the country (Kerala, Tripura, Manipur, Karnataka, Rajasthan, Madhya Pradesh, Telangana, Andaman and Nicobar Islands). Data was collected through semi-structured interview schedule by electronic means of communication during third phase of lockdown to assess the impact on consumption and livelihood of retailors/butchers due to lockdown Phase I and II (24th March- 03rd May, 2020). Butchers' chicken selling pattern, selling price and economic gain/loss were assessed on the basis of daily sale of chicken meat. The states and respondents were selected randomly, and grouped into rural, peri-urban and urban based on their residential location. Data were analysed by using simple statistical methods (Snedeckor and Cochkran, 1994).

Results and Discussion

Personal Profile of Butchers

The personal profile and distribution of butchers studied are presented in Table 1. Age and experience are important attributes of a person for doing any work or business for livelihood. Experience plays a vital role in performing one's work effectively.

Table 1: Distribution of respondents on the basis of age and experience in meat handling sector

Shop location	No. of shops (Butchers)	Average Age of butcher (Mean ±SE)	Experience in slaughtering (Mean ±SE)
Rural	11	35.9 ± 2.2^{a}	6.5 ± 1.2^{a}
Peri-Urban	13	42.8 ± 2.1^{ab}	11.2 ± 2.3^{ab}
Urban	14	43.6 ± 2.6^{b}	12.3 ± 1.6^{b}
Over all mean	38	41.1±1.4	10.2±1.1

$^{a, b}$ Values with different superscripts differ significantly ($p < 0.05$) within the column

In the present study, the average age of butchers varied from 35-45 years, which is more productive age group of a person. However, butchers of rural area were having significantly lower age and experience than that of urban butchers. The probable reason might be the lower opportunities for employment in rural areas attracting the young people in to chicken retail market. Bafanda *et al.* (2017) reported that majority of the meat handlers were from middle aged group and only males were involved in this profession, which was largely true in India also. Similar findings of active age and gender sensitivity (a male domain business) were observed by many authors in chicken retail market (Ngore *et al.,* 2011; Thakur *et al.,* 2014; Junaidu *et al.,* 2015; Umar *et al.,* 2015). Bafanda *et al.* (2017) also reported that the significant portion of meat handlers had 5 to 15 years of experience indicating the sustainability of meat business for a prolonged period with sizable income to maintain the family.

Impact on Selling Potential

In India, consumer's preference for freshly slaughtered birds might be probable reason for existence of retail meat/chicken shops in India. The shops are managed by meat sellers/butchers, who form an integral part of meat retail market. In fact, butchers act as system nodes in meat market as entire meat trade passes through butchers till the end point (Kumar and Keshav, 2010). About 95% birds were marketed in this manner in India.

Table 2: Impact of COVID-19 on selling potential of retails shops

Shop location	No. of shops	Before COVID-19 (Before 24th March, 2020)		During COVID-19 (During lockdown period)		Per cent (%) change in sale/day	Shops closed	
		Average No. of birds sold/day	Range	Average No. of birds sold/day	Range		No.	%
Rural	11	$58±12.1^{b}$	18-120	$12.8±1.5^{a}$	06-18	-77.9	2	18.2
Peri-Urban	13	$77.8±8.8^{b}$	10-260	$21.9±4.4^{a}$	08-48	-71.9	3	23.1
Urban	14	$103.2±4.9^{b}$	35-400	$61.4±1.4^{a}$	30-100	-40.5	3	21.4
Total	38	$81.4±12.3^{b}$		$33.6±5.3^{a}$		-58.7	8	21.1

$^{a, b}$ *Values with different superscripts differ significantly (p < 0.05) within a row*

The impact of COVID-19 pandemic on chicken meat sale in rural, peri-urban and urban areas is presented in Table 2. During the study period, 21.1 % butchers closed their shops due to low demand, COVID-19 panic, poor supply chain and high losses. Similar trends were observed in shops located in rural (18.2%), peri-urban (23.1%) and urban area (21.4%). About 58.7% reduction in chicken meat sales was observed due to the COVID -19, which might have reduced the income to the respondents' family. During pre-COVID period the average number of birds sold was about 81 at each butcher shop, and during the COVID period, it was significantly reduced to about 34 birds. Significant reduction was observed in rural area (77.9%) followed by peri-urban area (71.9%) and urban area (40.5%). The impact was severe and visible in rural and peri-urban areas affecting the family income resulting in distress condition. Lower demand and poor supply chain lead to reduction in potential utilization of butcher shops and opportunity losses.

Impact on Sale Price of Birds (Chicken Meat)

Farm gate prices were collapsed to all-time low at ₹15-35 per kg of live bird in various regions against the production cost of ₹ 80-85 per kg during the COVID-19 period (Kulkarni et al. 2020). Generally, the average price of chicken in rural area was comparatively higher (₹ 190/kg) than that of peri-urban (₹177/kg) and urban area (₹142.5/kg) as shown in Table 3. After COVID-19-episode, impact on the sale price was observed in all the regions (Table 3). Limited availability of birds at retail shops and reduced transportation avenues lead to increase in sale price by 29.9%. Maximum and significant increment was observed in rural area (49.2%) followed by peri-urban area (43.5%). Butchers mostly depend on commercial broilers and there was considerable reduction in production of commercial broilers, which hampered the supply chain in many parts of the country leading to price rise at retail market/ butcher shops. Some farmers disposed their birds on throw away price (Kulkarni *et al.,* 2020) due to the panic that COVID may spread through chicken, which was not true. Gradually, the price increased but showed variation at retail shops as the consumer demand increased as chicken meat and egg were considered to be one of the immune booster foods to fight against COVID. Range of price was found to be fluctuating across all the regions due to the demand and feeding habits of consumers.

Table 3: Impact of COVID-19 on sale price/kg of chicken in different regions

Shop location	Before COVID-19 (Before 24th March, 2020)	During COVID-19 (During lockdown period)	Per cent (%) change
	Average sale price ₹/kg)	Average sale price (₹/kg)	
Rural	190.1±2.8[a]	283.4±23.8[b]	49.2
Peri-Urban	176.9±10.7[a]	254±31.1[b]	43.5
Urban	142.5±8.7[a]	139.2±14.1[a]	-2.3
Overall	167.8±3.9[a]	218±17.3[b]	29.9

[a, b]Values with different superscripts differ significantly ($p < 0.05$) within a row

Impact on Profit

In the present study, during normal situation before COVID pandemic, the butcher's earning was ranging from ₹ 350 to 6000 per day depending upon the location of shop and scale of business (Table 4). Accordingly, the average net benefit per day varied between ₹ 1336.4 and 1917. Maximum benefit per bird was realised in peri-urban area (₹ 28.2) followed by rural (₹ 24.3) and urban area (₹ 23.2). Bafanda *et al.* (2017) conducted study in Jammu and Kashmir and reported that majority of the butchers were from middle income family with ₹ 10, 000 to15,000 income monthly from meat handling profession.

Table 4: Impact of COVID-19 on butcher's income/profit in Rural, Peri-Urban and Urban area

Shop location	Before COVID-19 (Before 24th March, 2020)			During COVID-19 (During lockdown period)				Per cent (%) change in profit/loss on per day basis and No of butchers
	Average Net profit/ day (₹)	Gross earning (₹)	Profit per bird (₹)	Net profit/day (₹) and No. of butchers	Net loss/day (₹) and No. of butchers	Profit per bird sold and Range (₹)	Loss per bird sold and Range (₹)	
Rural	1336.4	400-4000	24.3	800 (5)	-375.3 (4)	47.6(10-67)	-45.6 (-20 to -83)	-79.2 (9)
Peri-Urban	1917	350-6000	28.2	931.4 (7)	-216 (3)	35.9(10-50)	-14.3 (-9 to -19)	-69.4 (10)
Urban	1885.8	1000-3000	23.2	1295.8 (14)	-	22.4(10-25)	-	-31.3 (14)
Over all	1737.4±200.5[b]		25.2	800.6±149[a] (26)	-307 (7)	32	-32.2	-55.6 (33)

[a, b] Values with different superscripts differ significantly ($p < 0.05$) within a row

During the COVID 19 pandemic, butcher's earning was significantly reduced by 55.6 % compared to normal period. Maximum impact was found in rural area (79.2%) followed by peri-urban area (69.4%) and urban area (31.3%). Due to not utilizing full potential of butchers' shop resources, there was net loss/bird to the tune of ₹ 32.2. In rural area, this loss was ₹ 45.6 and peri-urban area, it was found to be ₹ 14.3. Some butchers kept their bird stock during lockdown period, and sold at higher prices realising higher income and profit. However, majority of butchers were in losses due to reduced sale, closure of shops, non-availability of birds from producer etc. ultimately affecting their livelihoods during the COVID pandemic.

Conclusion

The poultry sector was under pressure due to COVID-19 and continuous rise in feed costs. Financial losses were incurred due to break/inadequate supply chain during the pandemic period. COVID -19 had a visible impact on livelihoods, specially butchers/ retailors involved in unorganised slaughter process with significant reduction in income up to 55.6 %. The concerns and issues of butchers are left un-noticed due to lack of organised platforms. The Government and poultry industry should address their issues in exigencies, and support by all means. Governments should come out with an appropriate action plan to support the unorganised retail meat sector in the country. There is need to create consumer and other stakeholders' awareness about safety and role of poultry and its products in improving the immunity for better health.

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Conflict of Interests

There is no conflict of interest.

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