

Meat consumption in Andhra Pradesh

Meat consumption in Andhra Pradesh
an analysis of the meat preferences of rural people in India

The present study was conducted in Prakasam district of Andhra Pradesh, India to find out the meat preferences of rural people.(from Livestock Research for Rural Development)

Abstract

Introduction

Animal Husbandry is playing a pivotal role in the Indian economy by contributing by about 5.5% of Indian GDP (Gross Domestic Product) (Basic Animal Husbandry Statistics 2002). The contribution to GDP mainly depends on the production and productivity of the animal and consequent utilization of the products by the consumers. Meat and its products are the part of staple diet of many Indian families. The meat consumption behavior is the deciding factor for the development of livestock sector in general and a specific enterprise in particular. In general, consumer's behavior indicates the process, activities that people engage in when searching for, selecting, purchasing, using, evaluating and disposing of products and services, so as to satisfy their needs and decisions. The consumer behavior theory postulates that consumers look at completeness, monotonicity, reflexivity and transitivity, continuity and convexity, which influences their behavior. The study of consumer helps firms and organizations improve their marketing strategies by understanding the issues such as a) how consumers think, feel, reason and select between different alternatives and b) how consumer is influenced by his environment. Various external factors such as culture, sub culture, social class, reference groups, family decisions and certain situational determinants also influence the consumer's purchase decisions. The meat consumption behavior falls with in these lines and varies with the societal set up in which the consumers are operating. The culture, traditions, customs, taboos are influencing the consumption of meat, especially in Indian rural societies. Very limited information is available on the meat consumption patterns of Indian rural families. The specific meat consumption pattern will be of much use in planning the location specific and species based animal farming. With this background, the present study was formulated with the objective to identify the meat consumption patterns of rural population in a typical Indian society.

Materials and Methods

The present study was carried out in Prakasam district of Andhra Pradesh through an ex post facto research design. It is suitable design which envisages that the scientist does not have direct control of independent variables because their manifestations have already occurred or because they are inherently not manipulable (Kerlinger 1973). For the present study, 50 rural consumers were selected randomly spread over 21 villages of 18 mandals/ blocks. The data were collected through a pre tested interview schedule during March 2005. It was subjected to appropriate statistical analysis and the results are presented accordingly.

Results and Discussion

General profile of respondents

The statistical analyses revealed that majority of the respondents were middle aged (45.1 years), had the family size of 3.63 with nuclear families and land size of 6.15 acres. Most of the respondents had education up to high school and intermediate (50.0%). Among the total respondents, 62.0% were agricultural farmers, 30.0% were employees and remaining respondents had animal husbandry as their major occupation. The average annual income of respondents from different sources was found to be \$1055, out of which agriculture sector's share was \$320, employment \$684 and animal husbandry sector \$52 per year.

Meat consumption patterns

Even though 50 respondents were selected for the present study, only 40 respondents were considered in the present section as the remaining 10 respondents were found to be vegetarians. Hence, the data presented in the current section represents the expressions of 40 respondents only. The meat consumption patterns of rural people of Prakasam district of Andhra Pradesh, India (Table 1) revealed that the most preferred meat was chicken (50.0%), followed by mutton (25.0%) and fish (25.0%).

Table 1. Meat consumption behavior of Indian rural people

Occasionally	9	22.5
Specific occasions	6	15.00
Affordability		
Yes	24	60.00
No	16	40.00
Place of purchase		
Road side shop	5	12.50
Well maintained shop	13	32.50
Vendors	3	7.50
Home (dressed)	19	47.50
Regular consumption		
Good for health	16	40.00
Not good for health	20	50.00
Can't say	4	10.00

Koizumi et al (2001) reported similar results. The reasons attributed for their preference were taste (67.5%), habituated (10.0%), affordable (7.5%) and fond of chicken (15.0%). So the individuals taste is the key factor for their preference of chicken/ mutton/ fish (Harnack et al 1999). In the study area, no respondent had preferred beef or pork. This is an indicator of how the religious sanctions influence the meat consumption

behavior. It's a well-established fact that religious sanctions restrict Hindus (a dominant religion in India) to consume beef and Muslims to consume pork. So these factors ought to be considered by the livestock planners while advocating any species for meat purpose in a given area. In Brazil, it was reported by Castro et al (2002) that around 95% consume pork once in a week and in Germany it was pork consumed most often, followed by chicken (Becker et al 1997). The average cost of chicken in the study area was found to be \$1.5 per kg as against mutton cost of \$3. As the chicken has much market potential, the more emphasis is to be given on chicken production, as it is the most preferred meat. The rural consumers also preferred mutton and fish to some extent. Income, age, household size and ethnic factors did affect the purchase of meat according to Goodwin and Koudele (1990).

Majority of rural people were consuming chicken twice in a fortnight (45.0%) and twice in a week/ once in a fortnight (27.5%). A similar trend was observed in Germany also (Becker et al 1997). So it is the individual's choice, liking, occurrence of specific occasions and the affordability that decides the frequency of chicken consumption. The mutton was consumed only once in a month or on specific occasions by majority of the respondents (52.5%) which was due to the cost (double to that of chicken) and taste of mutton. The fish was also consumed once in a month or

occasionally by many rural consumers (27.5%), followed by once in fortnight (17.5%). Even though fish has no religious sanctions for consumptions, but the frequency of consumption was less due to irregular availability in the market and cumbersome cleaning process. Only 7.5% of respondents expressed their desire to consume beef occasionally and no one for pork. The low preference for beef / pork was due to religious sentiments (70.0%), tradition (22.5%) and taboos (7.5%). On the contrary, Castro et al (2002) reported that majority were pork consumers in Brazil.

The rural meat consumers' preference to have meat in the food on all days was also ascertained and found that only 27.5% respondents preferred meat on all days. The remaining 72.5% respondents' were not preferring meat daily due to the traditions (42.5%) and sentiments (25.0%) Very few people (5.0%) are not interested to consume meat on all days due to their personal reasons. Some of the consumers (27.5%) did not attribute any specific reason.

It was found that the majority were consuming more meat during winter followed by rainy season. Few people (15.0%) do not prefer meat in summer. More consumption of meat during winter and rainy season was due to cool weather so that the spicy nature of meat preparations may not cause any digestive disturbances. The season also played an important role in the consumption of meat. So the livestock farmers plan accordingly to market their poultry/ animals in winter and rainy seasons. This factor significantly forecast the farmers to start fresh batch of poultry accordingly so that they can have good market during winter and rainy seasons.

As the Indian meat consumers are controlled by the traditions and customs, it was thought appropriate to know the rural consumers' preference for meat during Sraavan, an auspicious month for Hindus which occurs during July- August - September. More than half of the respondents (57.5%) did not prefer to take meat during that particular month (Sraavan). This factor significantly influences the production aspects. The commercial poultry farmers do consider this factor while planning for starting a fresh batch of broilers. Even the consumption of eggs also will also be lowered during this period. This is a slack period for the meat industry in and around the study area.

It was found that chicken, mutton or fish were available only on a specific day of the week as expressed by 47.5% of respondents. Some respondents expressed that the meat was available occasionally (22.5%) and only on specific occasions (15.0%) and daily (15.0%). The quantity consumed in a month is based on the availability. On an average 1.07 kg of meat is being consumed by a family every month in the study area, which is very low when compared to recommended meat consumption of 50g/day/individual. Further the affordability to purchase at the current prices by rural consumers was less (60.0%). Each family is spending about \$3 towards meat per month. Gandhi et al (1995) reported that milk is far the most important item of consumer expenditure followed by eggs, meat and fish. Livestock farmers and extension agencies should find ways to reduce the production cost and so the chicken is available at cheaper price. The rural consumers were purchasing chicken / mutton from well maintained shop only (32.5%), followed by road side shop (12.5%). But majority of the chicken consumers (47.5%) were purchasing the live poultry birds and dress them at their homes. In Germany, chicken is purchased from super markets, while beef and pork from butcher shop ((Becker et al 1997). It was ascertained from the rural consumers that regular consumption of meat was not good for health (50.0%) and good number of respondents (40.0%) gave the positive response. In case of German consumers, fat/ cholesterol don't play a big part for all the meats - beef, pork and chicken ((Becker et al 1997). But in China, the urban and richer rural respondents tend to consume more beef, mutton, eggs and milk which showed positive correlation to heart diseases, cardio vascular disease and cancer (Chen Chun Ming 1995). Nowadays the health consciousness is on the rise due to various mass media channels and so rural consumers gave this type of response. The consumers' preference should be the basis for long term planning of meat production (Morrison et al 2003).

Meat quality characters as preferred by consumers

The meat quality characteristics as preferred by rural consumers were also ascertained (Table 2).

Table 2. Preferred meat quality characters

Items	Frequency (n=20)	Percentage
Freshness		
Chew's if compromised via	17	85.0%
Appearance		
Smell	1	5.0%
Taste	1	5.0%
Visual color	42	210.0%
Texture	24	120.0%
Others	3	15.0%
Meat fat content		
Excessive	17	85.0%
Adequate	16	80.0%
Not required	7	35.0%
Preparation of meat		
Prepared	14	70.0%
Not prepared	26	130.0%
Meatiness		
Flavor with meat fat ground	0	0.0%
Substituted by herbs	20	100.0%
None	0	0.0%
Type of dish		
Fry	7	35.0%
Roast	4	20.0%
Boiled	13	65.0%
Normal	14	70.0%

Most of the respondents (92.5%) were not compromising on the freshness of the meat. (Tzimitra Kalogianni 1997; Becker et al 1997). The respondents had strong desire for fresh meat and hence they are able to detect the adulteration of meat by taste (60.0%) and naked eye (30.0%). This is a favorable trend exhibited by the consumers. The rural consumers were well aware of the effects of consumption of adulterated meat. But the German consumers did not regard themselves as being capable to predict the quality of meat (beef) just by looking it at (Becker et al 1997). The meat hygiene was also essential (42.5%) and required (40.0%) as expressed by the respondents. So the rural consumers were well aware of the hygiene and its importance. This may be due to the awareness created by mass media and other channels.

The rural consumers (65.0%) were not in favor of processed food as it will not be tasty (20.0%) and hence they are habituated to eat fresh meat (70.0%). Only and few consumers (10.0%) expressed their inability to change their habits. On the contrary, Chinese shifted their dietary pattern because of economic change, leading to spend more money on processed food (Chen Chun Ming 1995). Most of the consumers of Korea purchased the processed meat products such as ham and sausage products once in a month (Cho et al 2003). Further it was suggested to implement quality-grading system for processed meat products to increase its market. Awareness on the advantages of processed meat has to be created by the farmers associations, extension and marketing agencies.

The Indian style of cooking meat is different from that of other countries like Brazil and USA. Generally Indian people prefer more spices, chilies in the preparations like in Pakistan, Sri Lanka and Bangladesh. That's why rural consumers preferred dishes that were spicy (37.5%), followed by normal preparations (35.0%), fried (17.5%) and roast (10.0%) type of dish in their food.

Differences in the perceptions within the age groups

The respondents were categorized into two groups based on their age i.e. younger than the middle age and older than middle age to find the differences in the perceptions within the two age groups with reference to meat consumption and quality characters (Table 3).

Table 3. Differences in the perceptions among the groups on meat consumption and quality (Chi square test)

References

1. Basic Animal Husbandry Statistics 2002 Government of India, Ministry of Animal Husbandry and Dairying, Krishi Bhavan, New Delhi.
2. Becker T, Benner E and Glitsch K 1997 Quality policy and Consumer behavior towards fresh meat. National Quality Policy report, Germany. Available at <http://www.uni-hohenheim.de/~apo420b/eu-research/euwelcome.htm>
3. Castro L C V, Almeida L P de, Franceschini S do C C, Proore S E, Ribeiro S M R 2002 Factors associated to the use of lard: a study with residents in the urban area of Vicososa- Minas Gerais. Bioscience Journal, Vol 18:41-50. Chen Chun Ming 1995 Eating patterns - a prognosis for China. AsiaPacific Journal of Clinical Nutrition. Volume 4: 24-28. <http://www.healthyeatingclub.org/APJCN/Volume4/vol4supp/chunming.htm>
4. Cho S H, Park B Y, Chin K B, Yoo Y M, Chae H S, Ahn J N, Lee J M and Yun S G. 2003 Consumption perception , purchase behavior and demand on ham and sausage products. Journal of Animal Science and Technology. Volume 45:273-282.
5. Gandhi V P, Gyanendramani and Mani G 1995 Are livestock products rising in importance? A study of the growth and behavior of their consumption in India. Indian Journal of Agricultural Economics. Volume 50:283-293. Goodwin B K and Koudele W 1990 An Analysis of consumer characteristics associated with the purchase of beef and pork variety meats. Southern Journal of Agricultural Economics. Volume 22:87-94.
6. Harnack L, Story M and Rock B H 1999 Diet and physical activity patterns of Lakota Indian Adults. Journal of American Dietetic Association. Volume 99: 829-835.
7. Kerlinger N Fred 1973 Foundations of Behavioural Research, Second Edition, Surjeet Publications, Kamala Nagar, Delhi.
8. Koizumi S, Jussaume R A Jr, Kobayashi S, Pan I J, Takaku S, Nishino M, Saito H, Baba M, Nagano M and Pan I J. 2001 Study on consumers behavior for meat consumption in U.S. Animal Science Journal, Volume 72:329-43.
9. Morrison J A, Balcombe K, Bailey A, Klonaris S and Rapsomanikis G 2003 Expenditure of different categories of meat in Greece: the influence of changing tastes. Agricultural Economics, Volume 28:139-50.
10. Tzimitra Kalogianni I 1997 Greek consumer behavior to meat. Agricultura Mediterranea. Volume 127:61-69.

Citation of this paper



Yes