An Outline of Meat Consumption in the Indian Population
- A Pilot Review

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Abstract
The consumption of meat is increasing in India and agriculture is considered as the backbone of a majority of people. Livestock plays a significant role, and poultry and dairy are the major sectors contributing to economic development. The majority of meats consumed in India are fish, bovine, mutton, goat, pig, and poultry. In Indian context, culture, traditions, customs, and taboos influence meat consumption to a great extent. However, studies show that urbanization has been causing a rise in demand for meat products. India is the world’s second largest exporter of beef. In India, 95% of goat meat produced is consumed locally. Meat consumption, in particular, is determined by the religions where pork is forbidden to Muslims and beef is prohibited to Hindus. The preference and consumption of chicken meat can be considered as a universal phenomenon and chicken meat is greatly accepted by consumers in India as compared to the other meat consumption. The increase of chicken meat consumption is due to the versatility of the meat, relatively low cost in comparison to other meat, and the acceptance of the chicken meat to all religions. There has been a great rise in the production of livestock products and this is expected to continue in the future. The pattern of meat consumption depends considerably on culture, tradition and urbanization. This review was formulated with the objective of identifying the meat consumption patterns in a typical Indian society.

Keywords: meat, India, consumption

Introduction

Agriculture is a major force driving the environment beyond the boundaries (Rockstrom et al., 2009). Of all activities humans engage on Earth, meat consumption has the largest environmental impact ranging from local to global. In India, growth in agricultural productivity has been slow during the past two decades, and demand is growing for poultry and dairy products, in addition to traditional staples, fruits, and vegetables. India remains home to the highest number of food-insecure people (Charles, 2012). Increase in meat production and its demand is expected to take place mainly in developing countries. Between 1995 and 2020 they will account for almost 85 percent of the increase in global demand as against 25 percent in developed countries (IFPRI, 1999). Over the past 50 years, meat consumption in particular has changed dramatically. Human diet and nutritional status have undergone a sequence of major shifts, stated as the nutrition transition (Popkin, 2006; Tey et al., 2010).

According Dietz et al. (1996), patterns of food production and consumption are at the core of all human ecology. Evidence for hominid and early human omnivore is rich and indisputable (Kiple, 2000; Larsen, 2000; Stanford and Bunn, 2001; Wing, 2000). Global meat including beef, pork and poultry exports have grown over 40% in less than 10 years, of 2014 forecast, depicting a strong demand and a record on rising incomes (Fig. 1). Beef and broiler meat are likely to reach a new record and pork to nearer level. For broiler meat, the growth continues from the Middle Eastern and Sub-Saharan African regions and it is expanding at a faster rate (USDA, 2013).

Among animal foods, meat is considered as highly nutritious and has become an integral component of human diet being a rich source of valuable proteins, vitamins, minerals, micronutrients and fats. Meat consumption is supposed to supply omega 3 fatty acid and conjugated linoleic acid that affords multifaceted nutrient for human health. The style of cooking meat in India is different.*Corresponding author: In Ho Kim, Department of Animal Resource & Science, Dankook University, Cheonan 330-714, Korea. Tel: +82-41-550-3652, Fax: +82-41-565-2949, E-mail: inhokim@dankook.ac.kr

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from that of other countries due to the incorporation of more spices, chilies in their preparations. The majority of meats consumed in India are fish, bovine (cow and buffalo), mutton, goat, pig, and poultry.

Meat-related development of major evolutionary importance was the domestication of many animal species that began about 11,000 years ago with sheep and goats and then progressed to cattle, pigs, horses, and camels (Alvard and Kuznar, 2001). In North East India livestock accounts for 18% of the value of output from the agriculture sector (Kumar et al., 2007). Since in early 1990s, India has achieved a striking speed of economic growth, leading to increased disposable income of Indian consumers. It would have been expected that income growth would lead to changes in the structure of demand for food commodities in India. However, research concerning India’s food consumption continues to be focused on foods from plants, while the demands for foods of animal origin are poorly understood. In India, there is only limited number of earlier studies that looked into animal resource consumption. These include studies of Sinha and Giri (1989), examining the consumption of livestock products for three states of Gujarat, Punjab and Tripura (Gandhi and Mani, 1995), discussed about the importance of livestock product demand in India till the late 1980s and Dastagiri (2004), provided some general features of livestock product demand using data up to 1993. However, no previous studies have well pictured the consumption of animal products. An evaluation of India’s animal product consumption with the latest available data is necessary. This review focuses on meat consumption in India because of its particularly serious effects on the global environment. With this background, the present review was formulated with the objective to identify the meat consumption patterns in a typical Indian society.

Factors Influencing Meat Consumption

In developing countries, culture plays a crucial role in determining food patterns (Lahsaezadeh, 2001). As Indians are controlled by the traditions and customs, thus the dietary habit is significantly influenced. In Indian context, culture, traditions, customs, and taboos influence meat consumption to a great extent especially in the rural societies. However, studies show urbanization has been causing a rise in demand for meat products. As people move to cities, they adapt to get into meat consumption. The difference in consumption and production methods correlates strongly with the overall economy of a country. India is the country that consumes the least meat per capita (Tepper, 2012). In India, cultural differences are also accountable for variations in meat consumption patterns. In the case of India, the Hindu tradition of non-violence is the major reason for why the country does not consume large amounts of meat (Hindu ethic of nonviolence, 1996). Differences in food consumption exist across regions and states. India’s north and western region people are mainly wheat consumers, while in the south are mainly rice consumers (Gandhi and Koshy, 2006). There is also a vast variation in the per capita consumption of livestock products across states and regions (Gandhi and Zhou, 2010).

In India, meat consumption is still below 5 kg/cap/year (FAO, 2012). Almost one third of Indians follow lacto-vegetarianism which came into prominence during the rule of Emperor Ashoka of the Maurya Empire, a promoter of Buddhism (Thakrar, 2007). Vegetarianism is much less common amongst Sikhs, Muslims, Christians, Bahais, Parsis and Jews (Yadav et al., 2006). Hinduism bars beef consumption, whilst Islam bars pork. Indian people ascribe greater cognitive functions to animals that they perceive to be alike to themselves (Epley et al., 2008), and omnivores attribute considerably fewer mental and emotional complexity to animals (Bilewicz et al., 2011). Thus the meat consumption habits of people in the state depend considerably on culture, tradition, urbanization etc, among others. Agrahar and Pal (2005) studied that, the food consumption pattern of Khasi tribals in 13 tribal villages in Meghalaya, India, and reported that their dietary pattern was still traditional. Rice, meat, roots and tubers, fermented foods, green leafy vegetables and fruits were consumed every day.

According to UNFAO (2007), Indians had the lowest rate of meat consumption. Most restaurants in India clearly distinguish “Vegetarian” and “Non-vegetarian”. India has given a system of marking edible products made from