

Demand analysis of milk and milk products in rural Punjab

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ABSTRACT

This study was undertaken to examine the demand of milk and milk products in rural Punjab. A multistage random sampling technique was adapted to draw a representative sample. The sampling units included districts, blocks, villages and households. Liquid milk, ghee and butter and curd and paneer were observed to have inelastic demand while other milk products having elastic demand. Liquid milk, ghee and butter and curd and paneer were observed to be expenditure inelastic, while other milk products were expenditure elastic.

Key words : Expenditure, Demand, Milk, Milk Products.

The demand for food items especially the milk and milk products in India is increasing rapidly due to several factors such as population growth, increasing urbanization, rising incomes, increasing awareness on food nutritive value, changes in tastes and preferences, consumer behaviour, etc. Understanding of how the prices, income and demographic factors affect food demand is essential for both food industries and welfare issues of poverty and malnutrition. Growth in incomes often results in changes in economic structure and consumption patterns. Punjab has witnessed substantial economic growth during the last decade. Continuous growth in per capita income has resulted in changes in consumption pattern, leading to increased demand for milk and milk products or feeds and fodder to raise animal productivity.

The non-availability of micro-level data has limited the previous studies of food demand, which have consequently concentrated on aggregate household consumption behaviour (Ray, 1980; Murthy, 1985 and Coondo and Majumdar, 1987), with the shortcoming, of not considering the influence of demographic factors. Micro data that contain information on the influence of demographic factors may yield substantially greater precision in the estimation of parameters than the estimate based on aggregate data (Orcutt *et al.*, 1969). The present study was carried out with the following specific objectives to estimate the complete demand system for milk and milk products in the rural Punjab.

METHODOLOGY

In order to achieve the objectives and draw a

representative sample, a multistage random sampling technique was used. At the first stage, average number of milch animals per hectare of net sown area per district was computed for all the districts, which were then arranged in a descending order of magnitude. The state was therefore divided into two regions namely, developed and less developed on the basis of concentration of milch animals per hectare. The districts having higher and lower concentration of milch animals than the state average constituted developed region and less developed region, respectively. One district each was randomly selected from the above said categories of districts. The district Amritsar represented the developed and Kapurthala represented the less developed regions. At next stage, two blocks were chosen from each sample district. At the next stage, a list of households of selected villages was prepared with the help of local residents and patwaries (Village Land Revenue Officers). Twenty households selected from each of the twelve villages of both the selected districts, thus constituted the sample of size 240, on the basis of which the results have been arrived.

Data collection:

The requisite data were collected through personal interview method. The information on family profile, education, income, pattern of expenditure, factors affecting demand for milk etc. was collected from the sampled farmers.

Demand system investigated:

Ever since Stone (1954) first estimated a system of demand equations derived explicitly from consumer theory, there has been a continuing search for alternative