

ABSTRACT

Abstract of thesis submitted to the Graduate School of Maejo University in partial fulfillment of the requirements for the degree of Master of Science in Agricultural Economics

PRODUCTION AND MARKETING OF EGGS IN CHIANG MAI PROVINCE

By

SONGKIAT KUNCHORN

NOVEMBER 2000

Chairman: Assistant Professor Jongkolnee Kerdpiboon
Department/Faculty: Department of Agricultural Economics and Cooperatives,
Faculty of Agricultural Business.

The present study on production and marketing of eggs in Chiang Mai focuses on social and economic factors that may have an influence on the operation and performance of poultry farmers in Chiang Mai. The aims of the study are to investigate the following issues: (1) factors that determine the volume of production of Chiang Mai poultry farms, and (2) characteristics of the market for eggs and the movement of egg prices. The empirical data on the production were obtained from an interview with a sample of 48 poultry farmers while data on the marketing were derived from an interview with personnel of business firms in the marketing of eggs. These field data were supplemented by time series secondary data on the prices of eggs provided by the Lanna Kasikij, a subsidiary of the Chareon Pokaphand Company, the Chiang Mai Office of Commerce and the Office of Northern Agricultural Services.

Results of the study show that in the production of eggs the farmers need not have a specialized education or training, and either male or female can perform equally well. Most of the farmers in the sample have their own land and are in the middle age group. The

production of eggs requires a considerable amount of investment capital that yield a return over an extended period of time. The ownership of land and the acquisition of capital and labor inputs are therefore a prerequisite for those who want to take up the business.

Most of the farmers in the samples operate a mixed farming enterprise that consists of crop production as the principal enterprise and egg production as a supplementary enterprise. The decision to include egg production into the system was based on the consideration of the total farm income and stability of the market and price of the principal crop. The egg producing part of the operation was carried out under a contractual arrangement with companies that market the eggs. The contractor provides input on credit, market outlet, and a guaranteed price. Such arrangement helps eliminate marketing risk of the farmers.

In the analysis of factors that determine the volume of output of the individual farmers in the sample it was found that the number of laying hens, inputs of feeds and environmental conditions of the housing for the hens as well as volume of labor input were the most significant factors.

The measurement of the degree of market concentration using the Herfindahl Summary Index (HSI) with a value of 0.54, indicated that the structure of the egg market was in the form of oligopolistic competition. There is a conglomerate under the name of Association of Egg Producers in Chiang Mai which consists of subsidiaries of the Chareon Pokaphand and the R.P.M. Farm and Feeds Company, together this conglomerate acts as the price leader as they have a combined market share of 53.87 percent.

Marketing margin was found to be 0.64 Baht per egg, or 28.70 percent of retail price due to the fact that several steps were involved in the marketing process from producers to consumers, each incurred a marketing cost and a profit margin.

The long term trend of the prices of eggs shows a weak upward movement of 0.00158 Baht per month. However, there appeared some seasonal fluctuations due to variations in the supply and demand for eggs. The supply decreases during the rainy season and rises to its peak in the dry season while demand reaches its peak during school months and drop to a low point during the holiday months. Besides seasonal variation the prices of eggs were also found to be affected by border trade situation. As some of the eggs produced are exported to Myanmar through a border check point, the periodic closure of this border crossing could cause a change in farm price up to 0.072 Baht per egg.

As for recommendation, poultry farmer who wish to undertake egg production as the principal enterprise should keep their hens in a well built housing that temperatures can be controlled. Good housing will ensure the regularity of egg laying that will lead to a greater volume of annual output. For new entrants, a contractual arrangement with egg marketing company would bring benefits in the form of new technology, low cost factor inputs, stable market outlet and a guaranteed price.