Turkey exports tomato sauce to E.E.C. countries. The biggest amount of import from Turkey and 90 percent of it is used by England and the remaining 10 percent is used by the other E.E.C. countries.

Packaging is very important to increase export to the Middle East

Countries which have demand for tomato sauce. These countries prefer little

packages for final consumption.

Tomato importing countries have demand for canned peeled tomatoes, canned sliced tomatoes and tomato pulp in recent years. In world trade tomato sauce export have almost reached its peak this make it important to find new means of export.

## DPTIMAL HEDGING IN FUTURES MARKETS, WITH REFERENCE TO THE DUTCH POTATO

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This paper is concerned with futures markets, in particular the futures market for potatoes in the Netherlands.

Three characteristics of futures markets will be discussed: efficiency. forecasting ability and risk reducing capacity. It is shown that the Dutch futures market for potatoes seems efficient and has some predictive power with respect to spot prices.

The main part of our paper is devoted to the risk reducing capacity of futures markets. The concept 'optimal hedging ratio' is elaborated. In particular, a decision making framework, to establish the optimal ratio, is proposed.

It is assumed that a hedger determines this optimum by maximizing his expected utility, which is operationalized as a function of expected return and variance of returns. This decisions is simulated for a systematic hedge by a potato farmer/wholesaler on the basis of Dutch market data for the period 1972-1985. It appears that the optimal hedging ratio depends to a large extent on the type utility function, i.e. whether the decision maker is risk-averse, risk-prone or risk-neutral.

Finally, some extensions of the 'optimal hedge' concept are discussed.

## PLAN AND DEVELOPMENT OF AN AGRICULTURAL COOPERATIVE

M. GRZNÁR (C.S.S.R.)

A plan has a decisive function in economic and social management of the agricultural cooperative sector in Czechoslovakia. A plan of source utilization plays a very significant role in planning the development of the cooperative enterprise production.

Sources used in agriculture are differentiated. To analyze total effects of used sources an econometric instrument, the model defined by this function is applied:

$$y = a_0 + \sum_{i=1}^{4L} a_i x_i$$