

An Application of the Transportation Model in the Distribution of UHT milk

Abstract:

This paper, using data from factories and depots of KCC that handle UHT milk, develops a model for the optional allocation of milk from factories to the depots in various parts of Kenya. In developing of this model, the paper takes into consideration the characteristics of individual depots, such as access roads, demand, storage capacities and KCC's distribution policy. By use of a case study approach, a transportation model is developed. It shows how distribution costs can be reduced through the use of Operations Research (OR) models. However, given the structure of the industry, the paper suggests that there should be an integrated transportation model that would analyze the allocation of products to individual depots while minimizing both transport and storage costs.