



King Faisal University

The Proceeding of 6th Conference of the
International Society of Camelid Research and Development

| ISOCARD-2023 |

"The Role of Camel in Food Security and Economic Development"



الجمعية الطبية البيطرية السعودية
Saudi Veterinary Medical Society



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المجعية الطبية البيطرية السعودية
Saudi Veterinaray Medical Society



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The 6th Conference of the International Society of Camelid Research and Development (ISOCARD)-2023

“The Role of Camel in Food Security and Economic Development”

A technico-Ecomomic Modelling to Assess The Profitability of Dairy Camel Farming

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AIM:

To propose a technico-economic model for assessing the profitability of a dairy camel farm.

THE MODEL:

The assessment of profitability in a farm is depending on the demographic changes, on the charges and on the products. The demography of a herd on a farm is estimated on the basis of entries (births and purchases) and exits (deaths, culling and sales), which in turn depend on a number of zootechnical parameters such as fertility rate for entries, mortality, abortion, offsprings, and culling rate for exits (Alzuraig et al., 2015). The costs are including the variable costs (purchase of animals, feeds, veterinary expenses, manpower, fluids, marketing) and fixed costs (depreciation costs for infrastructure and equipment, taxes and duties) while the products are including the milk and the culling animals.

ASSESSMENT OF THE COSTS:

The cost of feeding depends on whether the animals have access to free-range or rented pasture. In the latter case, the cost of the land (land taxes, maintenance, rental or amortization of the acquisition) must be integrated. In all cases, the amount of feed required must be estimated according to the composition of the herd.

Health-related costs are two types of expenditure: (i) preventive expenditure (vaccination, deworming, veterinary pharmacy), and (ii) veterinary intervention expenditure. It is possible to estimate them using the concept of the veterinary intervention unit (VIU) varying according the camel category.

The manpower comprises a fixed number of people for administrative and management tasks and a variable number for technical tasks.

THE PRODUCTS:

Concerning milk, an added value can be obtained in case of on-farm processing (cheese, fermented and pasteurized milk), but this implies additional investments in equipment.

FINAL PROFITABILITY:

The evaluation of the profitability of a dairy farm will therefore depend on many parameters, both zootechnical (productivity, performance) and human (management). The use of the demographic model combined with the evaluation of costs and products allows the expected financial results to be visualized

KEYWORDS

dairy farm, profitability, demographic changes

CITATION

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