

## التوليفات الاقتصادية المثلى للاعلاف الحيوانية بالزراعة المصرية

عادل يوسف عوض<sup>(1)</sup> ، محمود محمد عبد المنعم<sup>(1)</sup> ، محمد محمود حامد مليك<sup>(2)</sup>

(1) قسم الاقتصاد الزراعي - كلية الزراعة - جامعة المنوفية

(2) قسم اقتصاد الإنتاج - معهد بحوث الاقتصاد الزراعي

(Received: Nov. 10, 2011)

### THE OPTIMUM ECONOMIC FEEDS COMBINATION FOR THE LIVESTOCK IN THE EGYPTIAN AGRICULTURE

A. Y. Awad<sup>(1)</sup>, M. M. Abd- El Moneim<sup>(1)</sup> and M. M. H. Mileek<sup>(2)</sup>

<sup>(1)</sup> Agricultural Economics faculty of Agriculture Menofiya university.

<sup>(2)</sup> Agriculture Economics of Research institute.

**ABSTRACT:** *In spite of advanced technology and the abundance of agriculture resources Egypt is still relying and will be rely in the future on different kinds of foods such as, meats group, oil and fats group, grains group and sugar.....etc. Animal protein supply is of great concern to national strategies in Egypt due to it's vital role in humman nutrition and health maintenance . In spite of carrying out series of economic and social plans for developing animal resources, Egypt still Suffers from an increasing gap between consumption and production of animal proteins (red, white and fish). The tremendous increase in population combined with increasing demand for animal proteins products due to the higher stander of living have resulted in shortage green land for natural animal grazing, competition between human and animal on the limited cultivated areas. In addition to the high costs of red meat production, for the above response the Egyptian government aims to increase the production of livestock.*

*The problem of the research;: feeds for livestock is a highly dynamic subject, it's problems do not disappear along the animals age. Egypt as one of the developing continues suffer from increasing prices of red meat due to increasing the feeding costs which represent about 65% of total costs of production. The highly percent of livestock cost feeding create a tremendous decrease in meat self sufficient year after year. This recues achieve many problems such as (1)increase meat prices (2)increase meat imports (3)increase the deficit of balance of payments (4)shortage in foreign currency.*

*Aims of Research: This Research is performed to focuses on, the different combinations of animal feed for dairy cattle such as(Friesian, cows , Buffalo) at different weights. (4)determine the most economic combination of feeds for the different dairy cattle.*

*Sources of information : In order to fulfill the above objectives the Research depends on primary and secondary publish and unpublished data . in the other hand the investigator collect the data of livestock feeds from different books. Also the study uses different statistical methods.*

*Study layout: The research; contains the introduction (which contains the problem, aim of study and the source of information) reference, Arabic summary and English summary are found at the end of the research;*

*The research contain: Quantitative economic analysis are used in this research; to determine the most economic combinations of feeds for Egyptian dairy cattle specially Friesian and cows ., the first part introduce the design of the mathematical model of linear programming for minimize the livestock feed costs (as objective function) to solve the problem of distributing the limiting feed resources (as restrictions or constraints)on different kinds of livestock.*

*The second and the third parts deal with the estimation of the optimum feeds of the summer and winter livestock feeds to compare the results with the recommended feeds by the research institute of livestock production at market prices of the study in the second part classify the milk livestock into two major groups the first is Friesian cattle (non-dairy, low milk lactation, and medium milk lactation) and the second is caws cattle (non -dairy , milk lacing 4.5 K.G./Day, milk lasting 9K.G./Day ). Also the study in the third part classify the meat livestock into two groups, the first is calves or growing cows with weigh between 100-500 K.G. (2)Friesian, mixture and buffalos with weigh between 100-600 K.G. . Lastly the study found out that it is more preferable and profitable to use the components of the optimum feeds for milk or meat livestock than to use the recommended feeds by the research institute of livestock into two major groups the first is frisesiancattle (non-dairy,low milk lactation ,medium milk lactation) and the second is caws cattle (non -dairy , milklecting 4.5 K.G./Day, milk lecting 9K.G./Day). Alsothe study in the third section classify themeat livestock into two groups, the first is calves or growing cows 100-500K.G.(2) Friseian, mixture and bafalaw from 100-600 K.G. .*

*Lastly the study found out that it is more preferable and profitable to use the components of the*

*optimum feeds for milk or meat livestock than to use the recommended feeds by the research institute of livestock*

**Key words:** *Optimum economic feeds, nutrition, dairy cattle, linear programming*

---