



## **An Economic Study for the Alternatives of Traditional Fodder**

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**Abstract:** The availability of animal feed at suitable prices is considered one of the most important reasons of the increase in animal production. Recently, the non availability of feed and the increase in its prices exhaust both senior and junior bringers. Therefore, searching for alternatives of traditional feed becomes essential due to the impossibility of increasing the area that is cultivated by these forage crops. The problem of this study is represented in the feed production deficit to cover the necessary nutritional requirements for different types of animal production. This study aims at identifying the current position of the green feed in an attempt to reduce the feed gap through using hydroponic barley. The increase in the number of the heads' of cattle, buffalos, sheep, goats and camels reached about 34.9%, 16.9%, 23.1% and 22.1% in comparison to its counterpart in 2000, respectively. This increase in the livestock's number does not match with the tremendous increase in the population number during the same period of time. Among the most important crops of the green forage are; clover, Darawa, sweet sorghum and barley. It becomes obviously clear from this study that the non-traditional solutions for the production of green fodder can be the optimum economic solution to overcome the problem of deficit in the animal feed, including the production of green barley feed without agricultural soil and inside the isolated rooms; the so-called (Hydroponic). The hydroponic barley is the grains of barley that are cultured under specific conditions of temperature and humidity so that the length of the green part reached about 15-20 cm.

The total cost of accessories, excluding buildings, because it is a room at home or at farm equal 10165 pounds. It produces about 150 kilo of hydroponic barley, daily, which is enough for feeding six fattening calves or 6 milking cows or 50 sheep. The feeding cost for each cattle from the dry fodder per session is about 3780 pounds. The cost of hydroponic, fresh green barley is about 1800 pounds. The farmer can cover the cost of establishing the room a single session and also achieves a surplus that reaches around 1717 pounds. Thus, feeding on hydroponic barley saves about 450 pounds in comparison with its counterpart of clover per session. As a result, this study recommends expanding the production of hydroponic barley on a large scale, spreading awareness between farmers concerning the importance of feeding on hydroponic barley, and encouraging farmers to produce it. Based on this, the area planted by clover can be reduced and exploited in the cultivation of some strategically crops such as wheat

**Key Words:** Traditional Fodder - Barley - Hydroponic Barley - Fodder Crops.