



### SHEEP AND GOATS OFF-TAKE RATES UNDER BREEDERS CONDITIONS OF EGYPT

#### By

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**B.Sc.** Agriculture Science (Animal production) Damitta Branch - Mansoura University 2011

#### **THESIS**

Submitted in Partial Fulfillment of the Requirements
For The Degree of Master of Sciences
IN
Agriculture Sciences
Animal Production (Animal Breeding)

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### **5. SUMMARY AND CONCLUSION**

Animal production in Egypt is highly concentrated in the hands of small holders Understand, under small holders situations, sheep and goat production, production constraints, producers marketing behavior and the constraints limiting their participation in markets is useful in designing and implementing strategies to alleviate the problem of low market performance The objectives of this study were to assess the current commercial off take rates for sheep and goats, (2) to analyze the marketing behavior of the producers, and (3) to identify sheep and goat production and marketing constraints and improvement options.

A field survey using a pre-tested questionnaire was conducted with 60 households in four cities of Damietta governorate, located in the North Nile Delta, Egypt, namely, kafr saad, Ezarka, Faraskor and El.serw. Microsoft Excel was used to analyze the data. Descriptive statistics such as percentages and frequencies were conducted. The whole farm budget was performed using Microsoft Excel spreadsheet.

Findings revealed that the average age of respondents was about 46.6±13.6 years and about 95% of them were married. Farmers' age across the four districts was not significantly different. The present results suggested a high illiteracy rate (75%) among small ruminant farmers across the four regions. There were more illiterates in Faraskor (93%) and Kafr Saad ((80%) than El-Zarka

(66.6%) followed by El-Serw (60%) which had the least uneducated farmers. Majority (68.4%) of the respondents were identified themselves as full-time farmers, derived that household income from the sale of crops and/or animals only.

There was a positive relationship between education level and access to off farm job. There were an average of  $3.7\pm1.6$  males and  $2.5\pm1.4$  females in the house from which 66.2% and 26.4%, respectively, were involved in crop or livestock production. The average land holding per household in the study area is estimated as  $6.6\pm3.3$  acres. The farmers in the study area allocate larger proportion of their land (about 79%) for berseem as an animal fodder in winter. The Principal crops cultivated include wheat, cotton and rice. Across the four regions, the data showed that a households owned 68.1% sheep, 21.1% goats and 10.8% large ruminant.

There is indirect relationship between large ruminant holding and amount of land allocated for green fodder. On the other hand, a household was more likely to keep small ruminants when its head had relatively fewer economic options as was the case of Kafr- Saad households. Suckling age represent larger proportion in the flock for both species, while breeding females is the second largest age group in the flock which indicated that farmers are forced to rely early marketing of their lambs kids. The average litter size for sheep and goats were 1.27±0.25 and 2.30±0.49, respectively. The average weaning weight for lambs and kids are estimated as 17.30±5.11 kg and11.40±5.5, respectively.

The mean of parturition frequency in this study reached to 1.18 times / year for sheep and 1.48 times / year for goats .The average pre-weaning mortalities for sheep and goats are estimated as 7.6% and 13.3 %, respectively .Crop production alone contribute 78.4% of farm household income sources .Within the crop sector; cotton contribute the highest 48.21% Livestock contribute 21.6 % of the total farm income. Within livestock sector, sheep contribute the highest 64.81%, but large ruminant contribute 19.95 %. Conversely, the lowest percentage of household livestock income recorded with goats (15.23%). The study showed that annual off take of sheep and goats for commercial purpose were 37% and 54.8%, respectively.

There was small variation between sheep and goats in average number of goats flowing in and out of the flock. The ratio of inflow to outflow across the study areas ranged from 1.72 to 1.80, implying that the rate of inflow was about 75% higher than that of outflow. The present study showed that about 67% and 76% of commercial off-take were in terms male lambs and kids, respectively.

On the other hand, old breeding females accounted for only 6.4% and 1.5% of the commercial off-take rate for sheep and goats, respectively. Across different districts, births and purchases accounted for 95-98% and 1.8-4.4% of sheep and goats inflows while deaths and slaughtered for home consumption were respectively 7.6 % and 7.3% for sheep and respectively 13.3 and 0.8% for goats. In conclusion, given the lack of access to extension education and the high rates of

illiteracy among them, farmers are forced to rely heavily on traditional methods of raising livestock, resulting in lower productivity and off-takes. An important way to improve traditional livestock production is to link farmers to a related institution. Institutions such as extension services educate farmers on the adoption of new technologies. The data reported that 70.2% of the farmers do not access extension education. Given the high illiteracy rates in the study area, farmers are forced to rely heavily on traditional methods of livestock rearing.

The analysis confirmed that the traditional herd management system is not supported through the introduction of improved breeding and feeding practices and the local breeds are not differentiated and improved resulting in low productivity and off-takes. One important way to improve traditional livestock production is to link farmers to a relevant institution. Institutions such as agricultural extension services educate farmers on adoption of new technologies.

Farmers supply animals of varying sex, age and weight, yearling are the dominant class of animals to be sold to cover immediate cash needs prior to their attaining mat attaining mature weights. In most instances the farmer do not benefit much from the sale of these sheep. This is mainly because conditioning of yearling sheep using supplementary feed is not often practiced.

The benefits obtained from goat production in terms of cash, meat, and milk is low due to the high mortality rate .These indicate the potential of increasing commercial off take of goats by reducing sheep mortality and increasing the fertility rate.