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Farmers’ perception of sheep production constraints in rural Egypt

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Abstract

This study was conducted on small ruminant production constraints in rural areas of the Nile Delta in Egypt during the period from January 2021 to April 2022. A survey questionnaire was developed and pre-tested to collect quantitative data from one hundred and eight randomly selected families and interviewed separately. The household was asked to identify the most important obstacles facing the production of small ruminants and arrange them according to priority. Microsoft Excel was used to analyse the data. Descriptive statistics such as percentages and frequencies were performed. To examine the profitability of small ruminant production, the internal rate of return (IRR) was measured for each respondent based on actual field records during the period of this study. The results showed that the average productivity of sheep flocks in the Delta region was estimated at 23.80 kg; while the IRR obtained from raising sheep (14.5 %) was not a good alternative to whether this money was invested in the bank at the currently available interest rate (16 %). The study concluded that small ruminant projects are not economically feasible and this is related to a number of factors, in which animal feeding challenges ranked first (95 %) among the problems faced by farmers in the Delta region. Disease control came second (62 %), followed by low animal productivity (43 %), high pre-weaning mortality rate (36 %). The expected changes in the IRR were estimated as a result of the possible deterioration of the reproductive and productive performance of sheep. A 10 % decrease in the number of weaned lambs per ewe would reduce the IRR by 3.8 %. Reducing the weaning weight of the lambs by 1 kg leads to a decrease in the IRR by 1.8 %. A 10 % worse change in feed costs would drop the IRR by 7 %. Therefore, national research work supported by an effective extension program to improve small ruminant production in rural Egypt must be implemented.

Keywords: Constraints, productivity, profitabilit, rural Egypt, sheep