

**TECHNICAL PACKAGES OF NUTRITION AS A  
TOOL TO USE ON FARM FEED RESOURCES  
UNDER MIXED PRODUCTION SYSTEM**

By

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B.Sc. Agric. Sci. (Animal Production), Ain Shams University, 1999

**A Thesis Submitted in Partial Fulfillment  
Of  
The requirements for the Degree of**

**MASTER OF SCIENCE  
in**

**Agricultural Sciences  
(Animal Nutrition)**

**Department of Animal Production  
Faculty of Agriculture  
Ain Shams University**

**2018**

**Approval Sheet**

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## **ABSTRACT**

**Soliman Elsayed Soliman Atwa. Technical Packages of Nutrition as a Tool to Use on Farm Feed Resources Under Mixed Production System. Unpublished M.Sc. Thesis, Department of Animal Production, Faculty of Agriculture, Ain Shams University, 2018**

A cross sectional survey was conducted in four governorates namely Sharkia, Menoufia, El-Fayoum and Menia. The survey covered 200 smallholders practicing animal farming under crop-livestock production system. The required data was collected through semi-structured interview with questionnaire. This study aimed at characterizing nutritional packages adoption by using the system approach. The socio-economic analysis revealed that the illiteracy level was higher (42%) in Menia governorate as compared to others. The majority of the respondents (49%) working as farmers in their lands. Daily managerial practices depend mainly on the family members; Family labor represented the highest percentage being 88%, 92%, 80%, and 86% for Sharkia, Menoufia, El-Fayoum, and Menia respectively. farmers who used silage, hay, and the untraditional green forages, have the highest animal numbers, either from indigenous cows, crossbred cows, buffaloes, sheep, goats, and donkeies compared to those who do not use the nutritional packages (non-adopters). Adopters of silage, hay, and untraditional green forages had the highest percentage of dairy, heifer, fattening, and growing for crossbred cows and buffaloes compared to non-adopters. Sharkia governorate had the highest number and consequently percentage of animals followed by El-Fayoum governorate. Silage adopters recorded the highest significant ( $P<0.05$ ) value of daily milk yield (DMY) and total milk yield (TMY) for indigenous cow, crossbred cow and buffalo as compared to non-adopters. Calving interval significantly ( $P<0.05$ ) increased for all dairy animals (indigenous cows, crossbred cows, and buffaloes) under non-adopters of nutritional packages being 387, 388.57, and 402 days for the aforementioned animals, respectively. Dairy animals reared under the Nile Delta had the

highest significant DMY versus those under the Middle Egypt, where it was 4.05, 8.52, and 7.29 kg vs 3.76, 7.74, and 6.48 kg for indigenous cows, crossbred cows, and buffaloes, respectively. In conclusion, adopters of nutritional packages had the highest animal percent and recorded the highest productivity compared to non-adopters.

## ACKNOWLEDGMENT

I thank **Allah**, the most gracious, most beneficent most merciful for the help and guidance to achieve goals and them possible.

I wish to express my sincere thanks, deepest gratitude and appreciation to **Professor Dr. Hamdy M. A. El-Sayed**, Professor of Animal Nutrition, Animal Production Department, Faculty of Agriculture, Ain Shams University for his kind and close supervision, valuable assistance, guidance through the course of the study.

Many thanks are also due to **Professor Dr. Mohamed Abd Elaziz El-Wardani** Head Researcher of Animal husbandry, Anim. Prod. Res. Institute ( late) to help him to choose the subject ,work questionnaire, field testing , overcome the various obstacles ,urged him to continue studying , reading data and interpretation. We hope that God will overcome his evil and dwell in his spaciousness and make this message in the balance of his good deeds

Deep thanks are due to **Professor Dr. Hussin Saad Soliman** Professor of Animal Nutrition, Animal Production Department, Faculty of Agriculture, Ain Shams University for his continuous help, guidance and patience throughout the course of this work.

Special thanks to **Dr. Hussein Al-Nubi**, Director of the Institute of Animal Production Research, for his review of parts of the leter linguistically.

Thank you to my colleagues at the Malawi Research Station for helping me compile the study questionnaire data.

Thank you to my **wife** for her cooperation and her support of my circumstances and Finally, deepest appreciation and sincere gratefulness are due to **my father, mother, brother and sisters** for their encouragement and moral support during all my life.



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