

Dedication

To the memory of my late father, Elsheikh Eltayeb Malik, who struggled to secure for us a better quality of life and high level of education.

To the memory of my late brother Elrasheed, from whom I learnt a lot.

To my Lovely mother Fatima Sidahmed Elsheikh, who devoted her life for us.

To my lovely husband Saif Eldin Yousif Mohammed Saaed, for his continuous encouragement and moral support.

To those who are giving meaning to my life:

My lovely brothers and sister;

My brothers' wives and their kids;

Friends;

Collogues;

Relatives; and

Neighbors.

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Abstract

This study was conducted to investigate the different systems of family poultry adopted in rural Sudan, with special reference to the Eastern Nile Province. In addition it aims at reflecting to what extent family poultry can contribute to the household nutritional status and income.

The main concept of this study is that family poultry form the basis for increasing food production and income in rural communities. The most dominant systems are the extensive ones that are based on the local indigenous breeds and on scavenging feeding system.

This research was carried out on the Eastern Nile Province. Six villages were selected, namely; Aseilat Elguez, Alhasanab, Alhawila, Alkambo, Wad Bakheit, and Aldallatia.

The data were collected through different tools. The questionnaire was considered to be the main measuring instrument. Two hundred and fifty two households were selected through systematic sampling and interviewed. Face- to- face method was used, where an immediate feed- back was received. The obtained data were subjected to analysis through the Statistical Package for Social Science (SPSS). The final results were tabulated in term of frequencies and percentages. In addition to histogramms and pie-diagramms .

On the other hand, eighteen chickens were slaughtered for the purpose of measuring the gizzard thickness and weight. Coupled by the physical examination and chemical analysis for the crop content.

The study revealed that the rural households in the six villages under study have kept poultry for many years basically on scavenging system of management. Domestic fowls are the most dominant type of poultry in

comparison to other type of avian species. Thus the low-input indigenous Free-range chicken production is very popular amongst resource limited rural communities. Although family is carried out with minimal agricultural, veterinary, extension, training, and marketing support. But, still it positively contributes in the improvement of the households nutritional status and income. Households make use of the indigenous poultry knowledge acquired over a long period of time. Furthermore, respondents share information with neighbors. All respondents indicated that they require capacity building training programs in different issues concerning poultry husbandry practices. Moreover, diseases and poor health are considered one of the most constraints for increasing poultry production.

The chemical analysis of the crop content reflected low level of the protein. Thus the availability of protein was a constraint on production. Protein rich materials were of minor proportion in the scavenging diet. Furthermore, the analysis showed that, there is a positive correlation between the gizzard weight and thickness. The thick wall of the gizzard is likely a muscular adaptation to increase grinding activity.

The study concluded that, improvement in housing, feeding, and diseases control, coupled by institutional support in the dissemination of information, capacity building training programs in poultry husbandry practices, veterinary, extension, and financial services, will ultimately enhance better production.

خلاصة الأطروحة

أجريت هذه الدراسة لمعرفة النظم المختلفة المتبعة فى تربية الدواجن المنزلية بالمناطق الريفية بالسودان. ولقد تم اختيار محافظة شرق النيل لاجراء البحث الميدانى. تهدف الدراسة كذلك لعكس مدى مساهمة الدواجن المنزلية فى تحسين المستوى الغذائى للأسرة وكذلك دورها كمصدر لادرار الدخل. يعتمد الاطار النظرى للدراسة على ان للدواجن المنزلية دور ايجابى فى زيادة انتاج الغذاء والدخل بالنسبة للمجتمعات الريفية. يعتبر نظام التربية غير الممتد هو النظام السائد والذى بدوره يعتمد على السلالات المحلية الملتقطة.

لتحقيق أهداف الدراسة تم اختيار ست مناطق بمحافظة شرق النيل، والتي تشمل: العسيلات القوين، الحسنا، الحويلة، الكمبو، ود بخيت والدلتية.

أتبعت عدة طرق لجمع المعلومات ولقد أعتمدت الدراسة على الاستبيان كاداة رئيسية

لذلك. تم اختيار اثنين وخمسين ومائتين اسرة مربية للدواجن كعينة، ولقد تم اختيار هذه

العينة عن طريق العينة المنتظمة. أخضعت المعلومات المتحصل عليها للتحليل عن طريق

الحزمة الاحصائية الخاصة بالعلوم الاجتماعية. وتم عرض النتائج النهائية فى شكل

جداول والتي تحتوى على التكرار والنسب المئوية ، بالاضافة للرسوم البيانية. من ناحية

أخرى تم ذبح ثمانية عشر من الدواجن لقياس سمك جدار الحويصلة ووزنها بالاضافة

الى التحليل المعملى الكيمياءى لمحتويات المعدة.

خلصت نتائج الدراسة الى ان المجتمعات الريفية بالسودان لديها تجربة استمرت لسنين

بالنسبة لتربية الدواجن المنزلية، والتي تعتمد اعتمادا كليا على السلالات المحلية الملتقطة.

وتعتبر بقايا الاطعمة والتقاط بعض المواد الغذائية من البيئة المحيطة هى المصدر

الرئيسى للغذاء بالنسبة لها. وعلى الرغم من عدم توفر مدخلات الانتاج، وأنعدام الخدمات البيطرية ، الارشادية ،التدريبية والتسويقية، الا ان هناك حقيقة ماثلة وهى ان للدواجن المنزلية مساهمة فعالة وايجابية فى تحسين الوضع الغذائى بالنسبة لافراد للأسرة ، وتعتبر كمصدر لادرار الدخل. من ناحية أخرى فلقد أمنت كل الفئة المستهدفة على أهمية توفير البرامج التدريبية لاكتساب المهارات الصحيحة اللازمة لتربية الدواجن. بالاضافة كيفية محاربة الامراض والتي تعتبر من العوامل الرئيسية فى قلة الانتاج والنفوق.

عكس التحليل الكيمياءى المعملى لمحتويات المعدة وجود نسبة ضعيفة من البروتينات فى غذاء الدواجن المنزلية مما ينعكس سلبا على الانتاجية. كما ان هنالك علاقة ايجابية بين- سمك جدار الحويصلة ووزنها، ويعزى سمك جدارها كملأمة لزيادة مقدرة العضلات على طحن المواد الغذائية.

خلصت الدراسة الى أهمية تحسين البيئة الخاصة بحظائر الدواجن والنواحى الغذائية، بالاضافة الى أهمية محاربة الامراض. كذلك أمنت الدراسة على أهمية نشر- المعلومات، التدريب، والتمويل للارتقاء بالناحية الانتاجية.

