

Review of: "The Choice of Breeding Objectives and Selection Criteria Decided by Breeders of Various Goat Breeds and Factors Influencing Them"

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Potential competing interests: No potential competing interests to declare.

The presented article describes the breeders' choice of breeding objectives and selection criteria for the diverse group of goat breeds in the three regions of Abu-Dhabi Emirate. Using appropriate sampling for such a wide-scale research, the authors showed that the main objectives are meat production, adaptability to the environment, and disease resistance, and have identified milk production to be of lesser importance to the breeders. As could have been expected, the factors identified to influence breeders' decisions on breeding objectives were the breed of goat, region, property type, and herd size. Doe and buck selective criteria were reviewed. The work is original and provides a valuable perspective for application in the UAE and the wider region. The research also provides input for future research to be performed in order to provide more details on the topic. It would be beneficial for this input and the follow-up to be highlighted in the discussion section and the conclusions. The authors have rightly demonstrated that it is necessary to include the breeders' perspective in big-scale strategical planning but have not discussed or concluded, based on the found objectives and criteria, the need for improvement and standardization of the management options that would enable such an effort.

The manuscript is well structured. The abstract and the title are comprehensive, but minor editing of the English language is required in both, as well as in the rest of the manuscript. Some of the words are "autocorrected" with an obvious wrong meaning, and some of the expressions and sentences are not comprehensive.

The explorative research design is appropriate with a well-selected sampling. A multivariate or spatial approach would be advisable in the follow-up research.

The methods should be more thoroughly described, especially the methods of conducting and valorizing questionnaires. Please refer to the specific comments in order to address this.

The results are adequate, but should strive to have the tables and figures clearly presented and in such a way that each of them is self-explanatory if presented without the context of the manuscript text. More appropriate multivariate graphical presentation would add to the clarity of the obtained results.

The references and the discussion could benefit from an update of the period between 2019-2024.

I offer the following specific suggestions for your consideration:

1. It would be beneficial to include the information about the nine breeds mentioned in Table 1 in the section "Materials and Methods" under "Sample selection," and elucidate also which are the minor breeds pooled in the group of "other" in the presentation of results. At this point, I have found this information in Table 2, but it would be better suited to the general description of the sample.
Moreover, it would be useful for the wider reading audience to include information on whether any of the breeds in the sample have any production recording system in place, and in the Discussion section, it could be discussed which of the breeds have the most perspective to start the selection sooner. Additionally, it could be interesting to provide the number of herds/breeders/heads of crossbreeds.
2. In Tables 1, 3, and 5, it is important to discern which numbers are percentages and which are something else (p or N); maybe you can add to the graph title "Proportions (in percentage) of..." Also, it would benefit the ease of understanding of the tables to discern which numbers are totals and which are averages (maybe by introducing a new row). Additionally, it is not clear at this point, when looking at Table 1 as an independent piece of information: is the N number of breeders? Number of herds? Number of animals? Maybe an explanation of N in the table footer can give this information. Additionally, it is not clear what statistical test was performed to result in the reported p-value in Table 1. Is it regarding the differences between the breeds regarding the criterion of a specific breeding objective? The explanation should be described in the methodology section and also in the Table 1 description. Moreover, if it is so that e.g., DR, FP, BU, and KP denote that there is a statistically significant difference between the breeds regarding this criterion, it would be advisable to show in Table 1 (maybe using an asterisk sign *) which of the breeds differ, or use a different letter superscript to denote different groups of breeds regarding each objective (e.g., breed1^a, breed2^a, breed3^b, breed4^b, breed5^c.... where a superscript shows that breed1 and breed2 do not differ from each other, but they differ from the breeds denoted b (breed3 and breed4) and denoted c (breed5), and so on..) .
3. Likewise, for the other tables with similar information.
4. The tables should be placed in the Results and Discussion section after or before they are mentioned in the text for the first time.
5. The methods of conducting and valorising questionnaires should be replicable and therefore better described in the Methods section of the manuscript. Is it a semi-structured or structured interview? By what means was it conducted (in person)? How many questions did it contain? To what topic did the unstructured conversational part of the interview refer? If it was semi-structured and conversational, how many different researchers of what background conducted it? Is it possible to have either the questionnaire as Supplementary to the manuscript, or the table of the quantified results published as an open data table (e.g., via Zenodo).
6. Please provide in the "Materials and Methods" section the model(s) analyzed using SAS to distinguish factors influencing the selection objectives.
7. In Tables 2, 4, and 6, the results would be shown more comprehensively if you highlighted the extreme results (max and min bolded).
8. It is not required to report the exact p-value in any of the tables. If you agree on a certain alpha (e.g., 0.001, or 0.01) in the methodology section and report in the table description or table footer that all of the significant selection criteria or objectives are shown e.g., in bold font, or e.g., using one asterisk or 2 asterisks, then you can remove the whole p-

value row from the currently big and uncomprehensive tables.

9. Try to include in the discussion and the conclusions the recommended follow-up research, e.g., using spatial analyses that could address climatic and geographical specifics of the rearing area as well as administrative or/and economic boundaries, and highlight recommendations regarding the specific areas, or a multivariate analytical approach could elucidate other focuses than the modelling.