

P.O.Box 236, Tororo Gen:+256-454448842 Dir: +256-454448864 Mob: +256-782999874 Fax: +256-454436517

Email:ar@acadreg.busitema.ac.ug Website:www.busitema.ac.ug

ASSESSMENT OF FACTORS AFFECTING THE QUALITY OF HIDES AND SKIN IN BUDAKA TOWN COUNCIL

 \mathbf{BY}

MAGANDA KENETH

REG NO: BU/UP/2021/2376

A DISSERTATION TO BE SUBMITTED TO THE FACULTY OF AGRICULTURE
AND ANIMAL SCIENCES IN PARTIAL FULFILLMENT OF REQUIREMENTS FOR
AWARD OF BACHELORS DEGREE IN ANIMAL PRODUCTION AND
MANAGEMENT OF BUSITEMA UNIVERSITY

OCTOBER 2024

DECLARATION

I Maganda Keneth, declare that the research dissertation for assessment of factors affecting quality of hides and skin within Budaka town council is one of my own unique works. Except noted and properly attributed, all concepts, ideas and techniques in this dissertation are entimine. I certify that, in compliance with academic norms and information sources utilized in creation of this proposal have been properly cited and referenced.	irely
Furthermore, I certify that I have not submitted this proposal for consideration towards academic degree.	any
Approval	
Name MAGANDA KENETH	
sign Mat Da	
Date 11 / 11 12024	
SUPERVISOR'S BETAIL Name Frage Patrile Sign Date 11 11 2029	

DEDICATION

To my supportive father Mr. Dongo Wasoma, mother Miss. Baluka Suzan and to my beloved sisters and brothers.

ACKNOWLEDGEMENT

I am grateful to Budaka town council and Busitema University Arapai campus who are to make this study a learning process. My thanks first go to my beloved supervisor Dr. Etiang Partrick for his intellectual guidance to come up with a clear and detailed research proposal on this research project.

Sincere gratitude is extended to the Busitema University Faculty of Agriculture and Animal Science's department of animal production and management for their help during the research period.

TABLE OF CONTENT

DECLARATION	i
DEDICATION	ii
ACKNOWLEDGEMENT	iii
TABLE OF CONTENT	iv
LIST OF ABREVIATIONS	v
LIST OF TABLE AND FIGURES	vi
ABSRACT	vii
CHAPTER ONE: INTRODUCTION	1
1.1 Background	1
1.2 Problem statement	3
1.3 General objective of the study	3
1.3.1 Specific objectives	3
1.4 Research questions	3
1.5 Significance of the study	3
1.6 Justification of the study	4
1.7 Scope of the study	4
CHAPTER TWO: LITERATURE REVIEW	5
2.1 Current production practices and processing techniques	5
2.2 Identification of key factors influencing hide and skin quality	5
2.3 Environmental impacts of hides and skins production	6
CHAPTER THREE: METHODOLOGY	7
3.1 Research approach	7
3.2 Sampling design	7
3.3 Operational design	7
3.4 Observational design	8
3.5 Statistical design	8
3.6 Data presentation	
3.7 Ethical consideration	
3 8 Environmental consideration	Q

3.9 Limitations	
CHAPTER FOUR: RESULTS	10
Age Distribution:	11
Gender Distribution:	11
Occupation Distribution:	11
5.0 CHAPTER FIVE: DISCUSSION OF RESULTS	32
CHAPTER SIX: RECOMMEDATION AND CONCLUSION	34
6.1 CONCLUSION	34
6.2 RECOMMENDATION	35
REFERENCE	36
Questionnaire:	40
APPENDIX	44
Appendix 1 shows figures	4 4

LIST OF ABREVIATIONS

ITC

International Trade Centre

_	_ ~
1)'	
\mathbf{r}	

Budaka Town Council

LIST OF TABLE AND FIGURES

Table 4-1; Summary of Demographic characteristics of the respondents (N=100)	10
Table 4-2: Summary of other Information on hides and skin	15

Fig 4-1. Graph showing Gender Distribution of the Respondent	12
Fig 4-2. Graph Showing Age Distribution of Respondent	13
Fig 4-3. Graph Showing the Occupation of the Respondent	14
Fig 4-4. Graph showing Years of Experience of Respondent in hides and skin industry	19
Fig 4-5 Graph Showing types of Livestock reared by the Respondent	20
Fig 4-6 Graph Showing Respondent response in implementing Animal husbandry practices	21
Fig 4-7 Graph Showing Husbandry practices implemented by the Respondents	22
Fig 4-8 Graph Showing Methods of Slaughtering used by the Respondents	23
Fig 4-9 Graph showing humane handling practices used by the Respondents	24
Fig 4-10 Graph Showing Processing techniques used by the Respondents	25
Fig 4-11 Graph Showing Challenges faced during processing of hides and skin	26
Fig 4-12 Graph showing specific challenges faced	27
Fig 4-13 Graph showing factors affecting the quality of hides and skins in Budaka Town Coun	ncil. 28
Fig 4-14 Graph showing Respondent responds on Quality standards governing hides an production in Budaka Town council	
Fig 4-15 Graph showing measures for improving hides and skin quality	30
Fig 4-16 Graph showing solutions to the challenges affecting hides and skin industry	31

ABSRACT

The hide and skin industry in Budaka Town Council is characterized by a predominantly male workforce (65%), with a significant representation of middle-aged individuals (47% aged 28-38

years). This demographic trend reflects a young and active labor force, which is promising for the industry's sustainability. A notable commitment to improving the quality of hides and skins was found, with 83% of respondents implementing specific animal husbandry practices, particularly in parasite control and hygiene management. However, the reliance on traditional processing methods, such as salting, coupled with inadequate processing facilities and limited market access, reveals critical areas for enhancement. The cultural dynamics, including the predominance of Islamic slaughtering methods, further influence consumer expectations and market dynamics, while 62% of respondents acknowledged quality standards, indicating a foundational awareness ripe for further development.

To address the challenges identified, this study recommends significant investments in infrastructure development to improve processing capabilities and quality control within the industry. Training sessions focused on advanced processing techniques, humane handling, and animal health management are essential for equipping stakeholders with modern knowledge and skills. Additionally, promoting the formation of cooperatives among farmers and processors can strengthen collective bargaining power and enhance market access. Engaging government agencies and non-governmental organizations to support infrastructural investments and training initiatives tailored to the hide and skin sector will foster sustainable development. Finally, launching awareness campaigns on the importance of adhering to quality standards and best practices will elevate the overall quality and marketability of hides and skins produced in the region.

CHAPTER ONE: INTRODUCTION

1.1 Background

The hide and skin industry in Uganda remains a crucial economic sector, contributing significantly to livelihoods and export revenues (Wangui, 2016). Despite Uganda's substantial livestock population, traditional slaughtering methods and limited processing infrastructure pose challenges to the sector's development (Muzzo & Provenza, 2018). Challenges such as inadequate access to modern equipment, inconsistent quality standards, and weak regulatory enforcement have been documented, affecting the sector's competitiveness and market opportunities (Were, 2016) However, there is a growing recognition of the importance of value addition and investment in processing facilities to enhance product quality and expand market access (Page, 2003). With targeted interventions to address infrastructure limitations and improve regulatory enforcement, Uganda's hide and skin sector has the potential to significantly contribute to economic growth and employment creation (Wangui, 2016)

An important part of the global leather trade, the hides and skins sector creates jobs and stimulates economic growth in many parts of the world (Onyango et al., 2019). Hides and skins are essential to the local economy of Budaka Town Council, which is in Uganda's Eastern Region. They help many people who raise cattle and manufacture leather make a living. The quality of the materials produced poses a difficulty for Budaka Town Council's hides and skins business, notwithstanding its significance.

The quality of hides in Uganda is influenced by various factors, including livestock management practices, slaughtering methods, and processing techniques. Poor livestock management, such as inadequate feeding and disease control, can lead to hide defects and poor quality (A. Tilahun et al., 2016). Additionally, improper slaughtering practices and inadequate skinning techniques can result in damage to the hide, affecting its quality (Kahsay *et al.*, 2015). To address these factors, interventions such as improving animal husbandry practices, providing training on proper slaughtering and skinning methods (Wambui, 2016). By enhancing livestock management and slaughtering practices, the quality of hides can be significantly improved, leading to higher-value products.

REFERENCE

- Adem, M. (2019). Production of hide and skin in Ethiopia; marketing opportunities and constraints: A review paper. *Cogent Food and Agriculture*, *5*(1). https://doi.org/10.1080/23311932.2019.1565078
- Alan Rotz, C. (2020). Environmental Sustainability of Livestock Production. *Meat and Muscle Biology*, 4(2). https://doi.org/10.22175/mmb.11103
- Amde, B. (2017). Major Factors Affecting Hide and Skin Production, Quality and the Tanning Industry in Ethiopia. *Advances in Biological Research*, *11*(3), 116–125. https://doi.org/10.5829/idosi.abr.2017.116.125
- Antonakis, J., Avolio, B. J., & Sivasubramaniam, N. (2003). Context and leadership: An examination of the nine-factor full-range leadership theory using the Multifactor Leadership Questionnaire. In *Leadership Quarterly* (Vol. 14, Issue 3). https://doi.org/10.1016/S1048-9843(03)00030-4
- Bagstad, K. J., Semmens, D. J., Waage, S., & Winthrop, R. (2013). A comparative assessment of decision-support tools for ecosystem services quantification and valuation. *Ecosystem Services*, 5, 27–39. https://doi.org/10.1016/j.ecoser.2013.07.004
- Bekele, M., & Gezahegn, A. (2008). The Leather Sector: Growth Strategies through Integrated Value Chain. *EDRI: Research Research Report XI, June*, 1–51.
- bidin A. (2017). Опыт аудита обеспечения качества и безопасности медицинской деятельности в медицинской организации по разделу «Эпидемиологическая безопасность No Title. *Вестник Росздравнадзора*, 4(1), 9–15.
- Brown, A. F., Ma, G. X., Miranda, J., Eng, E., Castille, D., Brockie, T., Jones, P., Airhihenbuwa, C. O., Farhat, T., Zhu, L., & Trinh-Shevrin, C. (2019). Structural Interventions to Reduce and Eliminate Health Disparities. *American Journal of Public Health*, 109, S72–S78. https://doi.org/10.2105/AJPH.2018.304844
- By, E. (2021). *Value Addition of Milk and Meat: A Push to Entrepreneurship*.
- Chen, D., Mechlowitz, K., Li, X., Schaefer, N., Havelaar, A. H., & McKune, S. L. (2021).

- Benefits and Risks of Smallholder Livestock Production on Child Nutrition in Low- and Middle-Income Countries. *Frontiers in Nutrition*, 8(October). https://doi.org/10.3389/fnut.2021.751686
- Endris, M., & Feki, E. (2021). Review on Effect of Stress on Animal Productivity and Response of Animal to Stressors. *Journal of Animal and Veterinary Advances*, 20(1), 1–14. https://doi.org/10.36478/javaa.2021.1.14
- Fiehn, O., Wohlgemuth, G., Scholz, M., Kind, T., Lee, D. Y., Lu, Y., Moon, S., & Nikolau, B. (2008). Quality control for plant metabolomics: Reporting MSI-compliant studies. *Plant Journal*, *53*(4), 691–704. https://doi.org/10.1111/j.1365-313X.2007.03387.x
- Flintan, F. (2008). WOMEN 'S EMPOWERMENT IN PASTORAL SOCIETIES Fiona Flintan. *Access, September*. http://cmsdata.iucn.org/downloads/gender_format.pdf
- Grumiller, J., & Raza, W. (2019). The Ethiopian Leather and Leather Products Sector: An Assessment of Export Potentials to Europe and Austria. *Research Report*, 11.
- Harrison, M. T., Cullen, B. R., Mayberry, D. E., Cowie, A. L., Bilotto, F., Badgery, W. B., Liu, K., Davison, T., Christie, K. M., Muleke, A., & Eckard, R. J. (2021). Carbon myopia: The urgent need for integrated social, economic and environmental action in the livestock sector. Global Change Biology, 27(22), 5726–5761. https://doi.org/10.1111/gcb.15816
- Hasib, F. M. Y., Islam, M. S., Das, T., Rana, E. A., Uddin, M. H., Bayzid, M., Nath, C., Hossain, M. A., Masuduzzaman, M., Das, S., & Alim, M. A. (2021). Lumpy skin disease outbreak in cattle population of Chattogram, Bangladesh. *Veterinary Medicine and Science*, 7(5), 1616–1624. https://doi.org/10.1002/vms3.524
- Kahsay, T., Negash, G., Hagos, Y., & Hadush, B. (2015). Pre-slaughter, slaughter and post-slaughter defects of skins and hides at the Sheba Tannery and Leather Industry, Tigray region, northern Ethiopia. *Onderstepoort Journal of Veterinary Research*, 82(1), 1–7. https://doi.org/10.4102/OJVR.V82I1.931
- Kanagaraj, J. K., Panda, R. C., & Vinodh Kumar, M. V. K. (2020). Trends and advancements in sustainable leather processing: Future directions and challenges-A review. *Journal of*

- Environmental Chemical Engineering, 8(5). https://doi.org/10.1016/j.jece.2020.104379
- Kenea, T. (2010). Tilahun Kenea Review_on_Hide_and_Skin_Value_Chain_in_E. 5(1), 1–15.
- Kr, N. (2023). Determination of variance components for skin traits of ostriches in South Africa.

 March.
- ma azine. (2007). 2.
- Maina, P., Ollengo, M. A., & Nthiga, E. W. (2019). Trends in leather processing: A Review. International Journal of Scientific and Research Publications (IJSRP), 9(12), p9626. https://doi.org/10.29322/ijsrp.9.12.2019.p9626
- Muzzo, B. I., & Provenza, F. D. (2018). A review of strategies for overcoming challenges of beef production in Tanzania. *Livestock Research for Rural Development*, 30(12).
- Nayak, A. S. (2023). Fake Currency Detection Using Simple Image Processing and Machine Learning Techniques. *International Research Journal of Modernization in Engineering Technology and Science*, 05, 2409–2417. https://doi.org/10.56726/irjmets38826
- Okello, C., Pindozzi, S., Faugno, S., & Boccia, L. (2013). Development of bioenergy technologies in Uganda: A review of progress. *Renewable and Sustainable Energy Reviews*, 18, 55–63. https://doi.org/10.1016/j.rser.2012.10.004
- Onyango, C., Musyoka, P., Shibia, A., & Laibuni, N. (2019). *Towards Revitalizing Kenya's Skins, Hides and Leather Products Industry*. https://repository.kippra.or.ke/handle/123456789/2159
- Oruko, R. O., Ogola, H. J. O., Edokpayi, J. N., Volenzo, T. E., & Odiyo, J. O. (2021).

 Integration of Sustainable Development Goals into Leather Tanning Industries in SubSaharan Africa (Issue July). Springer International Publishing. https://doi.org/10.1007/9783-030-74693-3_32
- Page, S. (2003). Towards a Global Programme on Market Access: Opportunities and Options Report prepared for IFAD 1. April.
- Pinto, R., Patrício, J., Neto, J. M., Salas, F., & Marques, J. C. (2010). Assessing estuarine quality

- under the ecosystem services scope: Ecological and socioeconomic aspects. *Ecological Complexity*, 7(3), 389–402. https://doi.org/10.1016/j.ecocom.2010.05.001
- Qua, F. J. S. (2019). (Im)Material: a qualitative study on sustainable materials for design through a comparative review of leather and its modern alternatives. Im, 83. https://dspace.mit.edu/handle/1721.1/122335
- Schröder, P., Sauvêtre, A., Gnädinger, F., Pesaresi, P., Chmeliková, L., Doğan, N., Gerl, G., Gökçe, A., Hamel, C., Millan, R., Persson, T., Ravnskov, S., Rutkowska, B., Schmid, T., Szulc, W., Teodosiu, C., & Terzi, V. (2019). Discussion paper: Sustainable increase of crop production through improved technical strategies, breeding and adapted management A European perspective. *Science of the Total Environment*, 678, 146–161. https://doi.org/10.1016/j.scitotenv.2019.04.212
- Tilahun, A., Husen, A., Teshale, A., & Gashaw, T. (2016). Review on Pre and Post-Slaughter Defects of Hide and Skin in Ethiopia. *Advances in Biological Research*, *10*(3), 154–161. https://doi.org/10.5829/idosi.abr.2016.10.3.10423
- Tilahun, T. (2021). Review on Prevalence of Haemonchus Contort us in Ethiopian. *Journal of Pathology Research Reviews and Reports*, *3*(4), 1–4. https://doi.org/10.47363/jpr/2021(3)136
- Tournier, R. (2020). Tanning Chemicals' Influence in Leather Tensile and Tear Strength Review. *Journal of the American Leather Chemists Association*, 115(11), 409–412. https://doi.org/10.34314/jalca.v115i11.4185
- Urgessa, T., Demissie, T., Terefe, G., & Dejene, D. (2021). Community perception and practices on post-slaughter hide and skin quality management in and around Bale Robe and Goba. *Glob. Vet*, *23*(1), 1–10. https://doi.org/10.5829/idosi.gv.2021.01.10
- Wambui, J. M. (2016). Pre-slaughter and slaughter factors associated with post-harvest beef quality loss in small and medium enterprise slaughterhouses in Kenya. 2014(October), 1–138.