

Certainty and Doubt in Mamatuik: A Phenomenological and Fiqh-Based Analysis of Cattle Trading

Kasmidin*, Farida Arianti**, Abdul Mughits***, Taufik Hidayat**, Rezki Rahmatullah**, Pauzi M****

*UIN Sultan Syarif Kasim, Riau, Indonesia

**UIN Mahmud Yunus, Batusangkar, Indonesia,

***UIN Sunan Kalijaga, Yogyakarta, Indonesia

****UIN Sultan Thaha Saifuddin, Jambi, Indonesia

Email: kasmidinarabiy@gmail.com

Abstract: This study explores traders' understanding of mamatuik—the traditional skill of estimating the meat weight of live cattle—in buying and selling transactions at the Palangki livestock market. Using a qualitative phenomenological approach with in-depth interviews and observation, the research reveals three levels of trader competence: al-yaqīn, those certain and accurate in estimation (appraisers); al-syak, those partially knowledgeable but doubtful (amateurs); and wahm, those lacking the skill entirely (non-appraisers). This categorization reflects the fiqh maxim *اليقين لا يزال بالشك* (“certainty is not removed by doubt”), emphasizing that conviction determines trading confidence and continuity. In practice, mamatuik assesses potential meat weight and anchors price bargaining to that estimate, directly influencing a trader's decision to purchase and the final cattle price. While mutual understanding between buyer and seller supports fair transactions, it cannot fully eliminate defects such as gharar (uncertainty) stemming from ignorance of the goods. External factors also shape the process: the Livestock Service Office provides official weighing facilities that limit reliance on mamatuik, enabling buyers without this skill to use objective measurements instead. Overall, mamatuik represents both a localized non-verbal knowledge system and a practical economic strategy, where the interplay of skill, belief, and regulatory oversight determines market dynamics and the distribution of risk.

Keywords: Contract Transformation, Mamatuik, Skills, Selling, Understanding, Islamic Law

Abstrak: Penelitian ini mengkaji pemahaman para pedagang terhadap mamatuik—keahlian tradisional dalam memperkirakan berat daging sapi hidup—dalam transaksi jual beli di Pasar Ternak Palangki. Menggunakan pendekatan fenomenologis kualitatif dengan wawancara mendalam dan observasi, penelitian ini mengidentifikasi

tiga tingkatan kompetensi pedagang: al-yaqīn, yaitu mereka yang yakin dan akurat dalam perkiraan (penilai); al-syak, yaitu mereka yang memiliki pengetahuan sebagian tetapi ragu-ragu (pemula); dan wahm, yaitu mereka yang sama sekali tidak memiliki keterampilan tersebut (bukan penilai). Klasifikasi ini mencerminkan prinsip fiqh *اليقين لا يزال بالشك* (“keyakinan tidak hilang karena keraguan”), menekankan bahwa keyakinan menentukan kepercayaan dan kelangsungan transaksi. Dalam praktiknya, mamatuik menilai berat daging potensial dan menetapkan tawar-menawar harga berdasarkan perkiraan tersebut, yang secara langsung mempengaruhi keputusan pedagang untuk membeli dan harga akhir ternak. Meskipun pemahaman mutual antara pembeli dan penjual mendukung transaksi yang adil, hal ini tidak dapat sepenuhnya menghilangkan cacat seperti gharar (ketidakpastian) yang berasal dari ketidaktahuan tentang barang. Faktor eksternal juga memengaruhi proses ini: Kantor Layanan Peternakan menyediakan fasilitas penimbangan resmi yang membatasi ketergantungan pada mamatuik, sehingga pembeli yang tidak memiliki keterampilan ini dapat menggunakan pengukuran objektif sebagai gantinya. Secara keseluruhan, mamatuik mewakili sistem pengetahuan non-verbal yang lokal dan strategi ekonomi praktis, di mana interaksi antara keterampilan, keyakinan, dan pengawasan regulasi menentukan dinamika pasar dan distribusi risiko.

Kata kunci: Transformasi Akad/kontrak, *Mamatuik*, Kecakapan, Jual Beli, Pemahaman

Introduction

Understanding is the ability or capability¹ to explain, interpret, provide an overview of the object that is expected to be mastered and owned by business actors in the sale and purchase of livestock in Minangkabau. This understanding is the ability and skill of business actors in estimating the weight of cattle. The skills of business people regarding *mamatuik* are still limited², as evidenced by the inaccuracy

1 R P J Rajapathirana and Y Hui, “Relationship between Innovation Capability, Innovation Type, and Firm Performance,” *Journal of Innovation and Knowledge* 3, no. 1 (2018): 44–55, <https://doi.org/10.1016/j.jik.2017.06.002>.

2 Katherine E. Smith and Rosemary Anderson, “Understanding Lay Perspectives on Socioeconomic Health Inequalities in Britain: A Meta-Ethnography,” *Sociology of Health and Illness* 40, no. 1 (2018): 146–70, <https://doi.org/10.1111/1467-9566.12629>. Rajapathirana and Hui, “Relationship between Innovation Capability, Innovation Type, and Firm Performance.”

and inability of business people to estimate the weight of cattle. The lack of understanding of *mamatuik* is a problem³. This is to reach an agreement between the two parties mutually agreeing,⁴ because it can interfere with the smooth running of livestock buying and selling transactions, because this buying and selling transaction does not use scales as a weighing tool in weighing the weight of cattle.

Previous studies have talked about understanding in the context of economics categorized in the form of three types, namely; First, macro models in their ability to understand and predict financial crises; 5 second, the ability to understand consumer desires;^{6,7}; third, the ability to understand numbers⁸. In this case, there are still few studies that discuss the understanding of traders in the process of estimating the weight of cattle. Therefore, this study discusses the traders' understanding of estimating cattle weights in livestock sale and purchase transactions.

2 Smith and Anderson, "Understanding Lay Perspectives on Socioeconomic Health Inequalities in Britain: A Meta-Ethnography."

3 Logan E. Gin et al., "Students Who Fail to Achieve Predefined Research Goals May Still Experience Many Positive Outcomes as a Result of CURE Participation," *CBE Life Sciences Education* 17, no. 4 (2018): ar57, <https://doi.org/10.1187/cbe.18-03-0036>.

4 Khadijatul Musanna and Ali Sodikin, "Debates in Modern Economic Transactions: Assessing the Gopay Agreement in the Perspective of Indonesian Ulama," *Asy-Syir'ah: Jurnal Ilmu Syari'ah Dan Hukum* 55, no. 2 (2022): 329, <https://doi.org/10.14421/ajish.v56i2.1040>.

5 Warwick J. McKibbin and Andrew Stoeckel, "Modelling a Complex World: Improving Macro-Models," *Oxford Review of Economic Policy* 34, no. 1–2 (2018): 329–47, <https://doi.org/10.1093/oxrep/grx056>.

6 Alastair G. Tombs, Rebekah Russell-Bennett, and Neal M. Ashkanasy, "Recognising Emotional Expressions of Complaining Customers: A Cross-Cultural Study," *European Journal of Marketing* 48, no. 7–8 (2014): 1354–74, <https://doi.org/10.1108/EJM-02-2011-0090>.

7 Renato Lopes da Costa et al., "The Basis for a Constructive Relationship between Management Consultants and Clients (SMEs)," *Business: Theory and Practice* 21, no. 2 (2020): 666–74, <https://doi.org/10.3846/btp.2020.11872>.

8 Kenny Skagerlund et al., "Financial Literacy and the Role of Numeracy—How Individuals' Attitude and A Ffinity with Numbers Influence Financial Literacy," *Journal of Behavioral and Experimental Economics* 74, no. March (2018): 18–25, <https://doi.org/10.1016/j.socec.2018.03.004>.

The purpose of this study is to complement previous studies related to traders' understanding of estimating cattle weights. This review will examine the traders' understanding of determining the weight of cattle without using scales. The traders' understanding of *mamatuik* has transformed the livestock sale and purchase contract in Minangkabau from a bargaining system to a non-verbal system. Islam recognizes that changes in the pattern of community transactions have led to the emergence of new contracts whose legal status is not explained by the *mashadir ahkam*, in the form of the Qur'an and hadith. And Islam also views that in the aspect of *mu'amalah* contains an element of permissibility.

The Islamic legal system explains that in legal actions you should leave things that are doubtful. This is an interpretation of the application of the principle of *ikhtiyat*⁹. A legal action requires certainty and inner satisfaction, while certainty and inner satisfaction are obtained through *ihktiyat*. In *mashadir al- ahkam* there is no legal provision that contains doubt. Doubt comes from the actions of a *mukallaf*, which comes from contradictions and is partial. Doubt is not derived from the nature of the law, but the nature that comes later when the problem is connected with the legal act¹⁰. In the buying and selling of livestock in Minangkabau, there is uncertainty in the transaction. This is reflected in the *mamatuik* process to determine the weight of the cattle being traded. Business actors are only able to estimate the weight of the cattle and are unable to determine the actual weight of the cattle. What is approximate and uncertain is doubt. This is illustrated in the prophet's hadith, namely "Leave what you doubt, move on to what you do not doubt" (HR al- Nasai).

This article uses qualitative research methods with the type of field research. This research was conducted in Palangki livestock market, Sijunjung Regency, West Sumatra province. The reason for researching is because the area practices buying and selling livestock using the *mamatuik* system. Data collection techniques through in-depth interviews by submitting interview guidelines. Informants are free to convey answers. The researcher listened to the answers of the key informants. In addition, the researcher also made observations in the process of the transaction work. Data sources consisted of 11 cattle

⁹ A. Djazuli, *Kaidah- Kaidah Fiqh* (Jakarta: Kencana, 2006).

¹⁰ Ali Ahmad Nadwa, *Al- Qawaid Al- Fiqhiyyah* (Beirut: Darul Qalam, 1998).

owners, and 11 cattle token. Furthermore, the author analyzes the data through the stages of collecting data, selecting data in groups, processing data and reviewing it.

Level of Understanding of Islamic law

According to Imam al- Mahwi, he said that there are five levels in understanding knowledge, namely; ¹¹ Firstly, *yaqin* is a belief that is based on strong proofs; secondly, *iqtihad* is a belief that is not based on strong proofs; thirdly, *shaytan* is a contradiction between certainty and uncertainty; truth and error are of equal strength and cannot be reconciled; fourthly, *dhan* is justifying one of the points; fifthly, it is justifying the weaker of the two points.

Confidence is understanding that is not accompanied by doubt. Conviction is the antonym of the word doubt. Belief must be permanent and in accordance with reality. In the Islamic legal system, a fixed ruling based on belief will not be removed, unless there is *qathi'* evidence that is certain, and a ruling cannot be removed, just because of the appearance of doubt from the *mukallaf*. Belief cannot be removed by doubt and can only be lifted by something that is certain / or is clearly believed.

Mamatuik Sapi in Buying and Selling Livestock

In Minangkabau literacy, estimating is known as *mamatuik*. *Mamatuik* is the equivalent of the Minangkabau word "patuik" which means guess, appropriate, proper and the affix *ma* in which means "me". *mamatuik* is defined as estimating¹². *Mamatuik* is estimating the weight of cattle used as objects of sale and purchase in Minangkabau cattle trading transactions. In Islamic economic literacy, the word equivalent to estimating is *jizaf*. *Jizaf* is a word derived from Persian that underwent an Arabization process. According to its origin, this word can be read with three different readings in the form of *jizaf*, *juzaf* and *jazaf*. However, in its application, the use of kasrah on the letter *ج* is more

11 Zayn al- Abidin Ibrahim al- Shadir al- Hamwi, Ghazm Al Uyun Al- Basair Syarh Kitab Ashbah Wa Nazair (Beirut: Dar al- Kutub al- Ilmiyat, 1985).

12 Gozali Saydam, Kamus Lengkap Bahasa Minang (Minang- Indonesia) (Padang: Pusat Pengkajian Islam dan Minangkabau (PPIM) Sumatera Barat, 2004).

popular than the use of other letters with the reading of *jizaf*¹³. In this case, the author calls it *jizaf*, because the use of this word is more common and more well-known than the use of the other two words. Etymologically, *jizaf* is a transaction without using a measure, weighed, or measured using a certain measure¹⁴.

In practice, traders will estimate or estimate a certain weight or size by looking at the amount of quality or quantity of goods being traded. In this case it is also known as *onggokan*. Imam al- Shauqani in his book *naylul awthar*, he also argues that the *jizaf* transaction is a sale and purchase transaction that is carried out in a lump¹⁵. This is because the goods used as the object of the transaction are not measured or weighed with a certain weight and only the weight of each item is estimated. In buying and selling transactions, animals that are grazed before being sold will fetch a higher price than selling cattle before they are grazed¹⁶.

There are several arguments that indicate the permissibility of buying and selling *jizaf*. As for what is used as the basis of the law as the permissibility of buying and selling *jizaf* transactions are as follows: From Jabir bin Abdullah RA, he said, "The Messenger of Allah SAW prohibited the sale of dates without scales that are not known to the measure with dates that are clearly measured." (HR Muslim). Based on the above *Hadith*, it is understood that it is permissible to buy dates without a scale, and if the means of payment is a commodity other than dates¹⁷. And if the payment is also made using dates, then this sale and purchase transaction is invalidated because it contains elements of

13 Wahbah al-Zuhayli, *Al Fiqh Al Islâmiy Wa Adillatuhu* (Damsyik: Dar al Fikri, 1985).

14 Wahbah al-Zuhayli.

15 Syaikhahni, *Naylul Authar Syarh Muntaqa Al Akbar* (Mesir: Maktabah al-Halabi, n.d.).

16 M. C. Stockton, S. Dhoubhadel, and L. A. Stalker, "Cow Size and Age as Economic Divers of Beef Production Systems in the Nebraska Sandhills," *Professional Animal Scientist* 32, no. 4 (2016): 420–29, <https://doi.org/10.15232/pas.2015-01428>.

17 Wahbah al-Zuhayli, *Al Fiqh Al Islâmiy Wa Adillatuhu*.

usury *fadh*¹⁸. This is due to the mutual exchange of two commodities that have different levels of value¹⁹. Dates are one of the objects called *al- amwal al- ribawiyat* (ribawi objects), therefore if the transaction is carried out by barter then the dates must be weighed and the measure used must be the same, have the same value and payment must be cash.²⁰

The majority of scholars agree that *jizaf* transactions are permissible, but they differ on the implementation of *jizaf* itself and the type of assets traded²¹. This is divided into four types, namely; First, the Hanafiyah Mahzab, Abu Hanifah himself allowed buying and selling one measure on the subrah of *mitsliyat* property, and prohibited it on *qimiy* property. Abu Hanifah forbade selling a group of goats, and a goat was valued at one *dirham*. This transaction is invalid because there is an element of *jahalah in the contract*²². *Differences in quality of qimiy property*²³. This is different from the food *subrah*, because there is no difference in the quality of food, so the element of *jahalah* in food does not cause disputes. This is different from the food *subrah*, because there is no difference in the quality of food, so the element of *jahalah* in food does not cause disputes. bu Hanifah also forbade people who buy clothes that cannot be divided, clothes that are sold per meter valued at one dirham, while the seller does not mention the number of meters, as well as the prohibition of *jizaf* on a group of animals, slaves that have different sizes²⁴. This transaction is not valid because it contains the

18 Abd al- Azhim Jalal Abu Yazid, *Fiqh Riba; Dirasah Muqaranah Wa Syamalah Li Tatbiqat Mu'ashirah* (Beirut: Mu'assasah Risalah, 2004).

19 Abd al- Azhim Jalal Abu Yazid.

20 Syeikh Hasan Ayub, *Fiqh Muamalah Maliyah Fi Islam* (Cairo: Darusalam, 2003).

21 Wahbah al-Zuhayliy, *Al Fiqh Al Islâmiy Wa Adillatuhu*.

22 Nursyuhadah Abdul Rahman et al., "Religious and Socioeconomic Implications of Islamic Insurance: A Review," *International Journal of Financial Research* 10, no. 5 (2019): 313–20, <https://doi.org/10.5430/ijfr.v10n5p313>.

23 Natalie Chen and Luciana Juvenal, "Markups, Quality, and Trade Costs," *Journal of International Economics* 137 (2022): 103627, <https://doi.org/10.1016/j.jinteco.2022.103627>.

24 Luis Alfredo Ávila-López, Mengxue Zhen, and Carolina Zayas-Márquez, "Will Local Financial Development Affect the Competitive Advantage of Chinese

element of *jahalah*²⁵; Secondly, the Maliki school is of the opinion that *jizaf* transactions apply to any item, whether in the form of *mitsli* property, or *qimiy* property, or in the form of units of food, clothing, slaves, or animals²⁶;

Thirdly, the Shaafa'i school of thought is of the view that *jizaf* transactions are valid in the case of food that is known by both parties to the contract, because there is no element of *gharar* involved. This transaction does not apply to land or clothes whose value is unknown because of the difference in value, as well as transactions involving a group of animals. ; Fourthly, the Hambali Mahzab allows *jizaf* transactions on food without the seller or buyer knowing the amount. *Jizaf* also applies to clothing and animals.

There are several indicators that must be met when estimating goods including; first, the merchandise can be seen when the contract takes place²⁷. Each contracting party must know the merchandise being traded²⁸. In the livestock sale and purchase transaction, each contracting party knows the merchandise that is being traded because the first process in this transaction is to look at the cattle that each party wants. In addition, the sale and purchase is carried out in a special market so that there are no other transactions other than this livestock sale and purchase transaction that will disrupt the smooth running of this sale and purchase transaction; Second, each contracting

Enterprises' Exports?," Institutions and Economies 15, no. 1 (2023): 27–44, <https://doi.org/10.22452/IJIE.vol15no1.2>.

25 Mustapha Abubakar, M. Kabir Hassan, and Muhammad Auwalu Haruna, "Cryptocurrency Tide and Islamic Finance Development: Any Issue?," International Finance Review 20 (2019): 189–200, <https://doi.org/10.1108/S1569-376720190000020019>.

26 Wahbah al-Zuhayli, Al Fiqh Al Islamiy Wa Adillatuhu.

27 Jacqueline Best, "Uncomfortable Knowledge in Central Banking: Economic Expertise Confronts the Visibility Dilemma," Economy and Society 51, no. 4 (2022): 559–83, <https://doi.org/10.1080/03085147.2022.2121066>.

28 Rahmat Setiawan and Lila Gestanti, "Ceo Characteristics, Firm Policy, and Firm Performance," International Journal of Business and Society 23, no. 1 (2022): 371–89, <https://doi.org/10.33736/ijbs.4620.2022>.

party does not know the exact size and weight of the commodity²⁹. If one of the parties knows the value of the merchandise, then the other party has the right to exercise his *kehiyar* right, and if each of the contracting parties knows the exact value of the merchandise, then they have entered into a *gharar* transaction, and the contract becomes void.

In the sale and purchase of livestock, they are *mamatuik* to determine the price and quality of the cattle that each meat toke or farmer wants, they estimate the quality of the cattle by pressing the cattle's body and looking at the posture of the cattle. In this case, each breeder or buyer does not commit fraud in this practice, because the *mamatuik* transaction has become an urf for the Minangkabau people³⁰ and they are with the meaning and process of *mamatuik*; third, Existence in buying and selling estimates is buying with a large amount of money³¹. This transaction is legal in the eyes of the law for weighed and measured commodities such as grain and iron, measured goods such as land/land and clothing.

Fourthly, the commodity must be appraised by a party who is qualified to do so³². This sale and purchase transaction is void if the merchandise is difficult to estimate. In this case, each of the contracting parties or their representatives is a person who is competent in *mamatuik*. His competence is based on experience, practice and habitual patterns. The skill in estimating in the Minangkabau community's local wisdom³³, estimated sale and purchase transaction only reaches the size

29 Mingming Cui et al., "Dynamic Changes of Fruit Shape Traits and Its Correlation to the Morphology of Other Organs in Cucumber," *Agronomy* 10, no. 8 (2020), <https://doi.org/10.3390/agronomy10081111>.

30 Qosay A.E. Al-Balas, Rana Dajani, and Wael K. Al-Delaimy, "The Ethics of Gene Editing from an Islamic Perspective: A Focus on the Recent Gene Editing of the Chinese Twins," *Science and Engineering Ethics* 26, no. 3 (2020): 1851–60, <https://doi.org/10.1007/s11948-020-00205-5>.

31 Wahbah al-Zuhayliy, *Al Fiqh Al Islâmiy Wa Adillatuhu*.

32 Tobba Therkildsen Sudmann et al., "Knowledge Management from Senior Users of Online Health Information Point of View," *Electronic Journal of Knowledge Management* 18, no. 3 (2021): 325–37, <https://doi.org/10.34190/EJKM.18.3.2069>.

33 Sulfan Wandu Sulfan Wandu, "Eksistensi Urf Dan Adat Kebiasaan Sebagai Dalil Fiqh," *SAMARAH: Jurnal Hukum Keluarga Dan Hukum Islam* 2, no. 1 (2018): 181, <https://doi.org/10.22373/sjhk.v2i1.3111>.

of the cow's weight and the quality of the cow to be able to produce offspring. This will take a lot of time, energy and costly if the number of cattle estimated is large³⁴. addition, the use of tools such as three-dimensional imaging (3 D) is useful for monitoring the morphology of cows as well as the condition of cow growth and the use of this tool the results are closer than the results of an appraiser³⁵;

Fifth, the commodities used as merchandise are not too many³⁶. n the case of a large quantity of commodities, selling by estimation is prohibited, even if the commodity is of a certain type, because it is too difficult to estimate it. If the commodity is very small, it is not permissible to sell it by estimation, because it is not difficult to know it by counting it.; Sixth, each of the contracting parties does not know the measure or scale;

Seventh, The ground surface as the floor of the commodity is flat³⁷ and if it is bumpy, the sale contract is invalid because it contains the element of *gharar*. If each of the contracting parties later finds out that the surface of the land on which they made the estimated transaction is bumpy or hollow, then each of them has the right to *khiyar*.

Traders' Understanding of *Mamatuik*

Understanding is a means of uncovering the hidden economic practices that put traders as co-investigators in livestock buying and

34 Xiaoping Huang, Xinru Li, and Zelin Hu, "Cow Tail Detection Method for Body Condition Score Using Faster R-CNN," 2019 IEEE International Conference on Unmanned Systems and Artificial Intelligence, ICUSAI 2019, 2019, 347–51, <https://doi.org/10.1109/ICUSAI47366.2019.9124743>.

35 A. Bercovich et al., "Development of an Automatic Cow Body Condition Scoring Using Body Shape Signature and Fourier Descriptors," Journal of Dairy Science 96, no. 12 (2013): 8047–59, <https://doi.org/10.3168/jds.2013-6568>.

36 Wahbah al-Zuhayli, Al Fiqh Al Islâmiy Wa Adillatuhu.

37 Emma Reznick, Cara Gonzalez Welker, and Robert D. Gregg, "Predicting Individualized Joint Kinematics Over Continuous Variations of Walking, Running, and Stair Climbing," IEEE Open Journal of Engineering in Medicine and Biology 3 (2023): 211–17, <https://doi.org/10.1109/ojemb.2023.3234431>.

selling transactions³⁸. Understanding is very important because it can influence behaviors, choices, and actions³⁹. Comprehension provides a glimpse⁴⁰ about livestock trading transactions in Minangkabau. Understanding is key to measuring and monitoring⁴¹ about the stability of cattle trading transactions in Minangkabau. This is from the increase in livestock trading transactions⁴². . Trader understanding of *mamatuik* is required⁴³ to conduct livestock sale and purchase transactions in Minangkabau⁴⁴. Understanding is required to roughly describe⁴⁵, about the condition of the livestock being traded. This understanding is

38 Judith Hanks, "From Research-as-Practice to Exploratory Practice-as-Research in Language Teaching and Beyond," *Language Teaching* 52, no. 2 (2019): 143–87, <https://doi.org/10.1017/S0261444819000016>.

39 Mohamed Elgendi et al., "Subliminal Priming—State of the Art and Future Perspectives," *Behavioral Sciences* 8, no. 6 (2018): 1–23, <https://doi.org/10.3390/bs8060054>.

40 Arinola Adefila et al., "MyShoes – the Future of Experiential Dementia Training?," *Journal of Mental Health Training, Education and Practice* 11, no. 2 (2016): 91–101, <https://doi.org/10.1108/JMHTEP-10-2015-0048>.

41 Katie Leach et al., "A Common Framework of Natural Capital Assets for Use in Public and Private Sector Decision Making," *Ecosystem Services* 36, no. January (2019): 100899, <https://doi.org/10.1016/j.ecoser.2019.100899>.

42 Margaret L. Niess and Henry Gillow-Wiles, "Expanding Teachers' Technological Pedagogical Reasoning with a Systems Pedagogical Approach," *Australasian Journal of Educational Technology* 33, no. 3 (2017): 77–95, <https://doi.org/10.14742/ajet.3473>.

43 Vili Lehdonvirta et al., "Social Media, Web, and Panel Surveys: Using Non-Probability Samples in Social and Policy Research," *Policy and Internet* 13, no. 1 (2021): 134–55, <https://doi.org/10.1002/poi3.238>.

44 Danqi Chen, Jason Bolton, and Christopher D Manning, "A Thorough Examination of the CNN/Daily Mail Reading Comprehension Task," in *Proceedings Of the 54th Annual Meeting Of the Association for Computational Linguistics (Berlin, Germany, 2016)*, 2358–67, <https://doi.org/https://doi.org/10.48550/arXiv.1606.02858>.

45 Rebecca Spake et al., "Unpacking Ecosystem Service Bundles: Towards Predictive Mapping of Synergies and Trade-Offs between Ecosystem Services," *Global Environmental Change* 47, no. August (2017): 37–50, <https://doi.org/10.1016/j.gloenvcha.2017.08.004>.

needed to identify potential⁴⁶ traders in estimating cattle weights. Understanding is a key aspect⁴⁷ in the sale and purchase of livestock. A person can be said to "understand" if he knows enough about it⁴⁸. Detailed comprehension^{49, 50}, It is necessary to know about the process of livestock sale and purchase transactions in Minangkabau.

Understanding is needed to set effective policies⁵¹. Achieving understanding understanding is difficult⁵², and a simulation is needed for this to happen⁵³. Traders' understanding of *mamatuik* relates to their perception of livestock conditions⁵⁴. The heterogeneous community conditions within the scope of the Palangki livestock market have

46 Uta Wehn et al., "Participation in Flood Risk Management and the Potential of Citizen Observatories: A Governance Analysis," *Environmental Science and Policy* 48 (2015): 225–36, <https://doi.org/10.1016/j.envsci.2014.12.017>.

47 Joke Torbeyns et al., "Bridging the Gap: Fraction Understanding Is Central to Mathematics Achievement in Students from Three Different Continents," *Learning and Instruction* 37 (2015): 5–13, <https://doi.org/10.1016/j.learninstruc.2014.03.002>.

48 Christoph Kelp, "Understanding Phenomena," *Synthese* 192, no. 12 (2015): 3799–3816, <https://doi.org/10.1007/s11229-014-0616-x>.

49 Veronica Martinez et al., "Exploring the Journey to Services," *International Journal of Production Economics* 192 (2017): 66–80, <https://doi.org/10.1016/j.ijpe.2016.12.030>.

50 Noelia Zafra-Calvo et al., "Plural Valuation of Nature for Equity and Sustainability: Insights from the Global South," *Global Environmental Change* 63, no. October 2019 (2020): 102115, <https://doi.org/10.1016/j.gloenvcha.2020.102115>.

51 Romain Pirard, Lise Dal Secco, and Russell Warman, "Do Timber Plantations Contribute to Forest Conservation?," *Environmental Science and Policy* 57 (2016): 122–30, <https://doi.org/10.1016/j.envsci.2015.12.010>.

52 Rebecca Spake et al., "An Analytical Framework for Spatially Targeted Management of Natural Capital," *Nature Sustainability* 2, no. 2 (2019): 90–97, <https://doi.org/10.1038/s41893-019-0223-4>.

53 Kelly Rijswijk, Laurens Klerkx, and James A. Turner, "Digitalisation in the New Zealand Agricultural Knowledge and Innovation System: Initial Understandings and Emerging Organisational Responses to Digital Agriculture," *NJAS - Wageningen Journal of Life Sciences* 90–91, no. January (2019): 100313, <https://doi.org/10.1016/j.njas.2019.100313>.

54 Kwok Ho Tsoi et al., "Shark Conservation: An Educational Approach Based on Children's Knowledge and Perceptions toward Sharks," *PLoS ONE* 11, no. 9 (2016): 1–17, <https://doi.org/10.1371/journal.pone.0163406>.

different levels of perception of *mamatuik*⁵⁵. This heterogeneous condition is in the form of diverse occupations⁵⁶. These include livestock traders, livestock toke, brokers, food vendors, parking attendants, and pangulu pasar; diversified incomes^{57, 58}, in the form of between Rp. 500,000- Rp. 40,000,000 a week; the time span of transactions on the market⁵⁹. In developing the skills of *mamatuik* trade actors, this requires the knowledge and skills of trade actors in the Palangki livestock market. The force that drives a person to understand the *mamatuik* procedure is the ability to understand the numbers that reveal the weight of cattle in genera⁶⁰. The ability of traders to determine the weight of cattle will differ from one trader to another⁶¹. And one way to improve a trader's ability to *mamatuik* is to understand the problems that will arise when someone is estimating the weight of

55 Bulan Prabawani, Ita Hanika Musfirowati, and Eti Werdani Riandhita, "Socialization: An Important Factor of Redenomination Success in Indonesia," BEH- Business Economic Horizon 14, no. 3 (2018), <https://doi.org/http://dx.doi.org/10.15208/beh.2018.49>.

56 Nanxu Chen, Dongqing Sun, and Jing Chen, "Digital Transformation, Labour Share, and Industrial Heterogeneity," Journal of Innovation and Knowledge 7, no. 2 (2022): 100173, <https://doi.org/10.1016/j.jik.2022.100173>.

57 Marco Dueñas, Mercedes Campi, and Luis E. Olmos, "Changes in Mobility and Socioeconomic Conditions during the COVID-19 Outbreak," Humanities and Social Sciences Communications 8, no. 1 (2021): 1–10, <https://doi.org/10.1057/s41599-021-00775-0>.

58 Zhechen Geng and Guosheng He, "Digital Financial Inclusion and Sustainable Employment: Evidence from Countries Along the Belt and Road," Borsa Istanbul Review 21, no. 3 (2021): 307–16, <https://doi.org/10.1016/j.bir.2021.04.004>.

59 Marko Budler, Ivan Župič, and Peter Trkman, "The Development of Business Model Research: A Bibliometric Review," Journal of Business Research 135, no. June (2021): 480–95, <https://doi.org/10.1016/j.jbusres.2021.06.045>.

60 Kenny Skagerlund et al., "Financial Literacy and the Role of Numeracy—How Individuals' Attitude and Affinity with Numbers Influence Financial Literacy," Journal of Behavioral and Experimental Economics 74, no. August 2017 (2018): 18–25, <https://doi.org/10.1016/j.socec.2018.03.004>.

61 Yasmina Okan, Mirta Galesic, and Rocio Garcia-Retamero, "How People with Low and High Graph Literacy Process Health Graphs: Evidence from Eye-Tracking," Journal of Behavioral Decision Making 29, no. 2–3 (2016): 271–94, <https://doi.org/10.1002/bdm.1891>.

a cow⁶². One of the problems that commonly occurs in the *mamatuik* process is the inaccuracy in estimating the weight of cattle⁶³.

In terms of business people's understanding of *mamatuik* transactions, there are three main points of information obtained by the author, namely; first, they understand *mamatuik* and understand the ways of *mamatuik*, and are accurate in *mamatuik*; second, they understand *mamatuik*, understand the ways of *mamatuik*, but they are not accurate in *mamatuik*; third, they do not understand *mamatuik*

Tabel 1. Mamatuik Understanding

| No. | Use Of The Word Mamatuik | Mamatic Level Of Understanding |
|-----|--|---|
| 1. | <i>Mamatuik</i> is guessing the cow | Informants understand the etymological meaning of <i>mamatuik</i> |
| 2. | <i>Mamatuik</i> is a trading game for cattle toke to make a big profit | The informant understands <i>mamatuik</i> , because according to the informant, <i>mamatuik</i> is one of the toke's ways of manipulating the price by estimating the weight of the cow lower than the weight of the cow should be. |
| 3. | In the <i>mamatuik</i> process, if it shifts from 5 kg from the actual weight, then it is understandable | The informant was familiar with the ways of <i>mamatuik</i> , and he said that in <i>mamatuik</i> , estimates are not always precise |
| 4. | If the shift is more than 10 Kg, causing loss | The informant understands <i>mamatuik</i> , saying that if the estimation misses by more than 10 kg, it will cause a loss for the estimator. |

62 Mushlihah Rohmah and Sugeng Sutiarmo, "Analysis Problem Solving in Mathematical Using Theory Newman," Eurasia Journal of Mathematics, Science and Technology Education 14, no. 2 (2018): 671–81, <https://doi.org/10.12973/ejmste/80630>.

63 Stéphane Lavertu and Susan Webb Yackee, "Regulatory Delay and Rulemaking Deadlines," Journal of Public Administration Research and Theory 24, no. 1 (2014): 185–207, <https://doi.org/10.1093/jopart/mus031>.

| | | |
|-----|---|---|
| 5. | Cattle from Tanjung Ampalu have good meat quality | Informants understand that regional conditions affect cow weight |
| 6. | Grazed cattle have different weights than housed cattle, with housed cattle having more fat. | Informants understand that the grazing process can affect cow weight |
| 7. | Traders must be familiar with the age of cattle, cattle that are suitable for farming are between 2 and 4 years old, if they are more than 5 years old, they should be used as broilers | The informant understood one of the ways of <i>mamatuik</i> |
| 8. | The seller must be familiar with the <i>mamatuik</i> process | Informants said that it would be nice for business people to understand <i>mamatuik</i> |
| 9. | When the farmer buys the cattle he will use the <i>patuik</i> pakai system, but when the cattle toke buys the cattle, he will use the <i>patuik</i> daging system | informants are familiar with the types of <i>mamatuik</i> |
| 10. | I estimated the weight of the cow to be approximately 75 kg, but after I weighed it was only 65 kg, the cow had excess fat. | The informant understands <i>mamatuik</i> , but he is not good at estimating what causes the cattle to gain weight |
| 11. | I once experienced a loss, when I estimated the price at Rp. 120,000 it turned out that the price of meat had increased | The informant understood the <i>mamatuik</i> process, but was not accurate/capable in <i>mamatuik</i> because he was deceived by the market price |
| 12. | Toke do not understand the market price | Informants understand the <i>mamatuik</i> process, but are not accurate in <i>mamatuik</i> because they do not use the <i>market price</i> |
| 13. | Farmers don't know the market price of meat | Informants understand the <i>mamatuik</i> process, but are not accurate in <i>mamatuik</i> because they do not use the <i>market price</i> |

| | | |
|-----|--|---|
| 14. | Amateur business people will generally ask other parties, or compare their cattle with comparable cattle or play around in the livestock market | Informants do not understand <i>mamatuik</i> |
| 15. | Buyers who come from Tana Toraja will use the services of a middleman to transact the sale and purchase, otherwise they will bargain in general | Informants do not understand <i>mamatuik</i> |
| 16. | estimating the weight of cattle I am not familiar with, usually I would use a cattle scale | Informants are not good at <i>mamatuik</i> process |
| 17. | I don't understand <i>mamatuik</i> , I can only target the price of the cattle, like right now I bought the cattle for Rp. 10,0000 and I will sell it back during Eid al-Adha for Rp. 14,000,000 | Informants did not understand the <i>mamatuik</i> process and valued the cattle according to their own preferences. |
| 18. | <i>Mamatuik</i> is to look at the condition of the cow, but as for estimating the weight, I don't know | Informants do not understand the <i>mamatuik</i> process |
| 19. | <i>Mamatuik</i> only applies to meat toke | Informants did not understand the <i>mamatuik</i> process, and thought that <i>patuik</i> only applied to toke |
| 20. | <i>mamatuik</i> is estimating by considering the capital, grazing period and profit to be obtained | Informants did not understand the <i>mamatuik</i> process, and put the price of cattle arbitrarily. |
| 21 | estimating by using the age of the cow. Two year old Balinese cattle generally weigh 300 kg | Informants do not understand <i>mamatuik</i> , they only see the general condition of the cattle. |

| | | |
|----|---|--|
| 22 | If you are not familiar with the <i>mamatuik</i> process, we will compare it with a cow for example | The informant did not understand the <i>mamatuik</i> process, but only compared it with similar cattle |
|----|---|--|

Data source: researcher processed data

Based on the table above, it is understood that the business actors of buying and selling livestock in the Palangki livestock market are categorized into several forms, namely;

1. Farmers and buyers who come from the local Minangkabau community, they understand *mamatuik*, and are good at *mamatuik* procedures with an accuracy level of + 5 Kg from the actual cow weight; In this case, their understanding and knowledge of the *mamatuik* process is self-taught, taught from generation to generation by the family and generally understood by the community such as pointing one finger is understood as the number 164.
2. Farmers and buyers who come from the local Minangkabau community understand what *mamatuik* is, but they are not good at the *mamatuik* process. In this case, among the reasons they are not good at *mamatuik* are;
 - a. Inaccurate by estimating, the estimated result exceeds the weight by more than 5 Kg from the actual weight;
 - b. Has never estimated the weight of cattle
 - c. Not good at estimating at all
 - d. Using scales to determine the weight of cattle
 - e. Being fooled by the current market price of meat.
3. Breeders and buyers who come from regional communities, they are not familiar with *mamatuik*, and are not good at the *mamatuik* process.

Mamatuik is the ability of a livestock buyer to guess the net weight of a cow or goat by pressing on its limbs to prove that it is fat and dense and its meat is suitable for consumption or trade. In the tradition of the Minangkabau people, cattle are raised and raised for meat, therefore the sale and purchase of livestock contains the principle of *patuik dek katuju*, meaning that if the buyer likes the cow, they can estimate it, and

64 interview with A& M, cattle farmer, 13 January 2023

the estimate depends on the quality of the cow. In the livestock mamatuik transaction aims to see the condition of the livestock and the types of livestock the buyer wants. Based on an interview the author conducted with RY (30) a cattle toke he said that

“mancaliak anyo tagak, tu dari kaki, caliak matonyo, bulunyo, badannyo rancak to jo patuik dagingnyo” (looking at the condition of the cow when it is standing, looking at its feet, then the condition of its eyes and fur and the physical qualities of the cow, then assessing the weight of the cow)⁶⁵.

The author also interviewed Mr. Edi, as a cattle toke, he said that in determining the price of cattle, it is influenced by the skill in *mamatuik*, in addition to paying attention to the performance of the cow itself, he said *“harago jawi dicaliak dari bantuak taranak tu, gapuak ko kalau ndak kuruib ko, baa bulunyo, jantan ko ndak batino, kalau inyo jantan bisa ndak anyo mambuek batino manganduang, kalau inyo batino bisa nyo manganduang”*⁶⁶ (The price of a cow is based on its physical condition whether it is fat or thin, the quality of its fur and the sex of the cow, if it is a male it is fertile, and if it is a female it can become pregnant.)

Measuring a person's understanding is very difficult⁶⁷, therefore a thorough understanding of *mamatuik* is still lacking⁶⁸ for traders in the Palangki livestock market because there are still those who are inaccurate and not good at *mamatuik*. Understanding is more strongly oriented towards identification⁶⁹. By creating a pattern of change in

65 Interview with RY, cattle toke, 05 January 2022

66 Interview with Edi cattle toke di Sinjujung 06 January 2022

67 David Sands et al., “Using Concept Inventories to Measure Understanding,” *Higher Education Pedagogies* 3, no. 1 (2018): 173–82, <https://doi.org/10.1080/23752696.2018.1433546>.

68 Stefania Manca, “Researchgate and Academia.Edu as Networked Socio-Technical Systems for Scholarly Communication: A Literature Review,” *Research in Learning Technology* 26, no. 1063519 (2018): 1–16, <https://doi.org/10.25304/rlt.v26.2008>.

69 Honglin Chen and Debra Myhill, “Children Talking about Writing: Investigating Metalinguistic Understanding,” *Linguistics and Education* 35 (2016): 100–108, <https://doi.org/10.1016/j.linged.2016.07.004>.

livestock buying and selling transactions⁷⁰. Understanding is an idea that states this skill is not only in the form of knowledge about the ways of *mamatuik*, but also in the form of social interaction⁷¹. His understanding is also needed to change the pattern of conventional buying and selling transactions, namely bargaining into non-verbal transactions⁷². the understanding of *mamatuik* is not developed by each trade actor⁷³. his is evidenced by the fact that if they are not good at *mamatuik* they prefer to pay attention or compare with cattle that look the same or go to the cattle market, In addition, they will also compare similar cattle. In the transaction they will pay attention to the capital used in the sale and purchase transaction, the time span of grazing; when purchased the cow weighs 100/150 kg, within two years it will weigh 300 kg and the profit that will be obtained⁷⁴.

In Minangkabau livestock sale and purchase transactions, the understanding of *mamatuik* and its processes must be possessed by each contracting party. In the livestock sale and purchase transaction, the *mamatuik* process is an expert for each business actor⁷⁵. In Minangkabau livestock sale and purchase transactions, the object of the transaction is estimated. *mamatuik* skills are theorized as a valid condition of the livestock sale and purchase. In the general system of buying and selling, it is understood that buying and selling is valid if it fulfills the pillars and conditions of buying and selling.

70 Rijswijk, Klerkx, and Turner, "Digitalisation in the New Zealand Agricultural Knowledge and Innovation System: Initial Understandings and Emerging Organisational Responses to Digital Agriculture."

71 Jacqueline Kindell et al., "Everyday Conversation in Dementia: A Review of the Literature to Inform Research and Practice," *International Journal of Language and Communication Disorders* 52, no. 4 (2017): 392–406, <https://doi.org/10.1111/1460-6984.12298>.

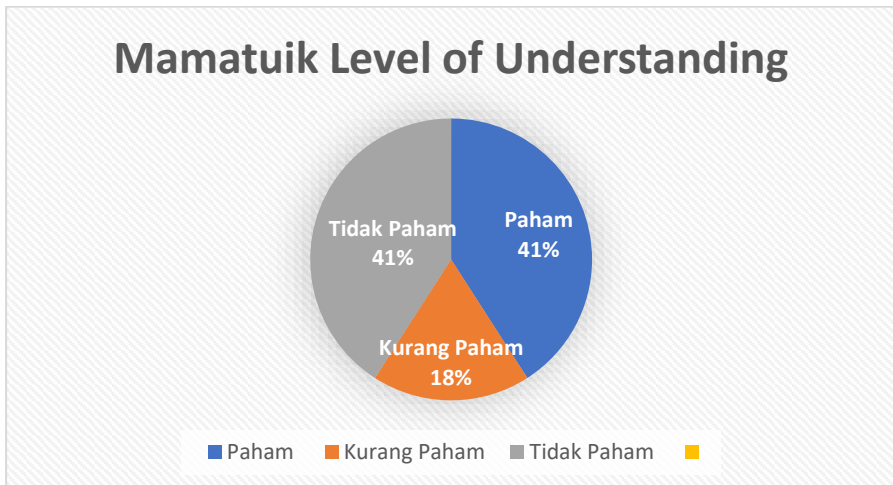
72 Xiao Shan Yap and Bernhard Truffer, "Shaping Selection Environments for Industrial Catch-up and Sustainability Transitions: A Systemic Perspective on Endogenizing Windows of Opportunity," *Research Policy* 48, no. 4 (2019): 1030–47, <https://doi.org/10.1016/j.respol.2018.10.002>.

73 Pamela Woolner, Ulrike Thomas, and Lucy Tiplady, "Structural Change from Physical Foundations: The Role of the Environment in Enacting School Change," *Journal of Educational Change* 19, no. 2 (2018): 223–42, <https://doi.org/10.1007/s10833-018-9317-4>.

74 Interview with Informants 2 & 3, Amateur traders January 11, 2023.

75 Nasrun Haroen, *Ushul Fiqh* (Jakarta: Logos, 1996).

Some of them understand the knowledge of *mamatuik*. The level of understanding of trade actors varies due to the background of trading livestock, social conditions of people with different cultures. This can be seen in graph 1



Based on the graph above, it is understood that the level of understanding of trade actors in *mamatuik* in the Palangki livestock market is comparable between actors who understand *mamatuik* and those who do not understand *mamatuik*, this is due to the culture of the community in the Palangki market is heterogeneous, meaning that it does not only come from local Minangkabau traders, but also comes from national level traders.

The level of understanding of trade actors about *mamatuik* is categorized into three forms, namely; al-yaqin are those who know about *mamatuik* and are accurate in estimating, they are called appraisers, al-syak are those who know about *mamatuik* and doubt in estimating, they are called amateurs, *waham* those who do not have the ability to do so, and are called non-appraisers⁷⁶. This is reflected in the fiqh rule that reads *اليقين لا يزال بالشك* (belief cannot be eliminated by doubt). In principle, beliefs have levels, at the level of certainty

76 Faisal Qazi et al., "The Degree of Certainty in Brain Death: Probability in Clinical and Islamic Legal Discourse," *Theoretical Medicine and Bioethics* 34, no. 2 (2013): 117–31, <https://doi.org/10.1007/s11017-013-9250-8>.

substance leads to belief⁷⁷. If something is a matter of principle that has been believed in, then it will be permanent and continuous, and there is no reason whatsoever to change that belief. Therefore, beliefs should not be removed merely because doubts arise.

Mamatuik Sapi in the sale and purchase of livestock looks at the possible weight of meat on the cow's intact (still alive) body. Traders face off to bargain over how much the cow is worth in terms of meat. Cattle are pegged with units of meat weight. This transaction in *mamatuik* can be seen in Figure 1.

Figure 1. *Mamatuik* Transaction



The trader's ability to predict the weight of the cow will influence his decision to buy the cow or not⁷⁸. The ability of the trade actors to understand the wishes of each party in the livestock sale and purchase transaction will result in a business action⁷⁹. The agreed price of cattle. The ability of each business actor to understand each other's desires is not enough to prevent errors and defects in the sale and purchase

77 Seyed Hossein Azimidokht and Maryam Tavakolnia, "The Semantic Model of the Concept of 'Certainty' in Nahj Al-Balagha: A Focus on Collocation and Substitution Relationships," *Religious Inquiries* 11, no. 1 (2022): 57–72, <https://doi.org/10.22034/RI.2022.210596.1379>.

78 William Sun, "Toward a Theory of Ethical Consumer Intention Formation: Re-Extending the Theory of Planned Behavior," *AMS Review* 10, no. 3–4 (2020): 260–78, <https://doi.org/10.1007/s13162-019-00156-6>.

79 F. M. Bosco et al., "Do Executive Function and Theory of Mind Predict Pragmatic Abilities Following Traumatic Brain Injury? An Analysis of Sincere, Deceitful and Ironic Communicative Acts," *Journal of Communication Disorders* 75 (2018): 102–17, <https://doi.org/10.1016/j.jcomdis.2018.05.002>.

transaction⁸⁰. Among the defects in buying and selling transactions is ignorance of the goods being traded, which triggers *gharar*⁸¹. The involvement of stakeholders, in this case the Livestock Service Office, also limits the ability of traders to *mamatuik* cattle. This involvement is in the form of the provision of livestock weighing at the Palangki livestock market. This means that if buyers do not understand or do not want to conduct a *mamatuik* sale and purchase transaction, then they will bring the livestock to the weighing station

Conclusion

Their *mamatuik* understanding already has a structured level of knowledge. A contract in which one or more parties possess the ability to perform *mamatuik* is strengthened by the guidance of a knowledgeable person, whereas a contract involving parties without that ability should be accompanied by someone competent to ensure the validity of the sale. The traders' skills can be categorized as *al-yaqīn* (certain and accurate appraisers), *al-syak* (doubtful amateurs), and *wahm* (non-appraisers), reflecting the *fiqh maxim* *اليقين لا يزال بالشك* ("certainty is not removed by doubt"), where firm conviction sustains market confidence and decision-making. This layered belief system underscores that price agreements based on clear estimation reduce the risk of *gharar* (transactional uncertainty). Nevertheless, the presence of the Livestock Service Office, which provides official weighing facilities, introduces an external mechanism that can limit reliance on *mamatuik* while offering objective verification for those who lack the skill. This research therefore highlights that understanding these levels of belief and the regulatory context is essential for fair and transparent livestock trading. It is recommended that people intending to sell livestock first

80 Marijn Janssen et al., "Will Algorithms Blind People? The Effect of Explainable AI and Decision-Makers' Experience on AI-Supported Decision-Making in Government," *Social Science Computer Review* 40, no. 2 (2022): 478–93, <https://doi.org/10.1177/0894439320980118>.

81 Yasushi Suzuki, "A Post-Keynesian Perspective on Islamic Prohibition of *Gharar*," *International Journal of Islamic and Middle Eastern Finance and Management* 6, no. 3 (2013): 200–210, <https://doi.org/10.1108/IMEFM-Sep-2012-0086>.

understand these transactional variables to meet market standards, and that experienced traders assist less-skilled sellers by sharing information and clarifying cattle prices so that all parties—especially cattle farmers—achieve mutually beneficial and satisfactory outcomes.

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