

The Role of Public Law in Determining the Islamic Calendar in Indonesia

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Abstract

The debate over the determination of the beginning of the Islamic calendar in Indonesia is still a complex issue that has a vast impact on religious, social, and public policy aspects. This polemic arises due to differences in *hisāb* (astronomical calculation) and *rukyat* (*hilāl* observation) methods adopted by various Islamic organizations, such as Nahdlatul Ulama (NU) and Muhammadiyah. This study used a qualitative approach with descriptive-normative analysis to explore the urgency of legal formalization and the supremacy of public law in determining the beginning of the Islamic calendar. The findings show that the absence of a binding legal authority is the main factor fuelling disagreement. Government-organised isbat sessions are often not universally accepted, so a more assertive legal policy based on national consensus is needed. By considering the principle of benefit, this study recommends the integration of sharia, astronomical technology, and positive law to improve accuracy, legitimacy, and uniformity in determining the beginning of the Islamic calendar.

Keywords: Islamic calendar, hisāb, rukyat, public policy, maşlahah

Perdebatan mengenai penentuan awal bulan Hijriah di Indonesia masih menjadi isu yang kompleks dan berdampak luas pada aspek keagamaan, sosial, dan kebijakan publik. Polemik ini muncul karena perbedaan metode *hisāb* (perhitungan astronomis) dan *rukyat* (pengamatan *hilāl*) yang dianut oleh berbagai organisasi Islam, seperti Nahdlatul Ulama (NU) dan Muhammadiyah. Studi ini menggunakan pendekatan kualitatif dengan analisis deskriptif-normatif untuk mengeksplorasi urgensi formalisasi hukum dan supremasi hukum publik dalam menetapkan awal bulan Hijriah. Temuan penelitian menunjukkan bahwa ketiadaan otoritas hukum yang mengikat menjadi faktor utama yang memicu ketidaksepakatan. Sidang isbat yang diselenggarakan pemerintah sering kali tidak diterima secara universal, sehingga diperlukan kebijakan hukum yang lebih kuat berbasis konsensus nasional. Dengan mempertimbangkan prinsip kemaslahatan, studi ini merekomendasikan integrasi antara syariah, teknologi astronomi, dan hukum positif guna meningkatkan akurasi, legitimasi, serta keseragaman dalam penetapan awal bulan Hijriah.

Kata Kunci: kalender Islam, *ḥisāb*, rukyat, kebijakan publik, *maṣlaḥah*

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A. Introduction

The determination of the beginning of the Islamic calendar is an important issue that continues to be a polemic in Indonesia, especially regarding essential months such as Ramadan, Shawwal, and Zulhijja. ¹This polemic arises from the methodological differences between the *hisāb* (astronomical calculation) and *rukyat* (visual observation) approaches used by various Islamic organizations, including Muhammadiyah and Nahdlatul Ulama (NU), and this is often reported in the media both conventional media and social media.² This is often a topic of discussion among the public and academics.³ This controversy arises due to differences in requirements and methods, whether using direct observation (rukyat) or astronomical and mathematical calculations.⁴ This polemic has a vast and unending impact, especially in Indonesia.⁵ This disagreement not only affects religious aspects but also creates doubts in society and challenges the implementation of public policies. This condition causes inconvenience in worship for Muslims.⁶ Also, differences in determining the beginning of the lunar year have become controversial among Muslims.⁷ This issue is growing because each person has a different perspective on determining the beginning of the lunar year.⁸ As a single authority body, the government has tried to bridge these differences by carrying the *imkān ar-rukyat* criteria. The criteria is an offer of solution from the decision of the Committee for Harmonising Rukyah and Islamic Taqwim of the Ministers of Religious Affairs of Brunei, Indonesia, Malaysia, and Singapore (MABIMS).9

In a pluralistic country like Indonesia, this non-uniformity reflects the urgent need for a legal system that can harmonize Sharia principles with the supremacy of public law. Various Islamic organizations in Indonesia, such as Nahdlatul Ulama (NU) and Muhammadiyah, have different approaches to determining the beginning of the Hijri month. The majority of Ulama, from classic and contemporary, holds the determination of the beginning of the month by *Rukyatul Hilāl* or *istikmāl*.¹⁰ NU still conducts *rukyatul hilāl* in the field even though the *ḥisāb* results show the *hilāl* is still below

¹ Ahmad Wahidi, Noer Yasin, and Ali Kadarisman, "The Beginning of Islamic Months Determination in Indonesia and Malaysia: Procedure and Social Condition," *Ulul Albab: Jurnal Studi Islam* 20, no. 1 (2019): 324, https://doi.org/https://doi.org/10.18860/ua.v20i2.5913.

² Ahmad Musonnif, "Islamic Law and Science in NU-Muhammadiyah's Lunar Calendar Determination," *Al-Hilal: Journal of Islamic Astronomy* 6, no. 2 (2024): 200, https://doi.org/https://doi.org/10.24252/ifk.v8i1.46899.1.

³ Khaerun Nufus, "Sidang Isbat Penentuan Awal Bulan Kamariah Prespektif Hukum Islam," *Inklusif* 3, no. 1 (2018): 1, https://doi.org/https://doi.org/http://dx.doi.org/10.24235/inklusif.v3i1.2476.g1504.

⁴ Siti Muslifah, "Upaya Menyikapi Perbedaan Penentuan Awal Bulan Qamariyah Di Indonesia," *Azimuth: Journal of Islamic Astronomy* 1, no. 1 (2020): 74.

⁵ Sakirman, "Kontroversi Hisab Dan Rukyat Dalam Menetapkan Awal Bulan Hijriah Di Indonesia," *Elfalaky: Jurnal Ilmu Falak* 1, no. 1 (2017): 3, https://doi.org/https://doi.org/10.24252/ifk.v1i1.3674.

⁶ Dito Alif Pratama, "Ru'yat Al-Hilāl Dengan Teknologi: Telaah Pelaksanaan Ru'yat Al-Hilāl Di Baitul Hilal Teluk Kemang Malaysia," *Al-Ahkam* 2, no. 26 (2016): 274, https://doi.org/https://doi.org/10.21580/ahkam.2016.26.2.930.

⁷ Nursodik, "Tinjauan Fikih Dan Astronomi Kalender Islam Terpadu Jamaluddin 'Abd Ar-Raziq Serta Pengaruhnya Terhadao Hari Arafah," *Al-Manahij: Jurnal Kajian Hukum Islam* 10, no. 1 (2016): 146, https://doi.org/https://doi.org/10.24090/mnh.v10i1.922.

⁸ Susiknan Azhari, "Gagasan Menyatukan Umat Islam Indonesia Melalui Kalender Islam," *Ahkam: Jurnal Ilmu Syariah* 2, no. 2015 (15AD): 251, https://doi.org/https://doi.org/10.15408/ajis.v15i2.2869.

⁹ Irfan, "Comparative Study of Fazilet Calendar and Mabims Criteria on Determining Hijri Calendar," *Al-Hilal: Journal of Islamic Astronomy* 5, no. 1 (2023): 101, https://doi.org/https://doi.org/10.21580/al-hilal.2023.5.1.13760.

¹⁰ Zainul Arifin, *Ilmu Falak Cara Menghitung Dan Menentukan Arah Kiblat, Rashdul Kiblat, Awal Waktu Shalat, Kalender Penanggalan, Awal Bulan Qomariyah* (Yogyakarta: Lukita, 2012), 34.

the horizon. In contrast, Muhammadiyah has its own approach, which is also based on religious provisions.¹¹ As a result, Muslims often face confusing situations, such as differences in *Eid al-Fitr* or *Eid al-Adha*. This phenomenon reflects the lack of supremacy of public law that can be a single reference in this matter.

This polemic also exposes a gap in Indonesia's legal system, which has not fully integrated sharia principles with positive law. As a country with the largest Muslim population in the world, Indonesia faces a significant challenge in creating inclusive and accommodating policies. Existing regulations, such as Law No. 3/2006 on Religious Courts, do not provide detailed formal mechanisms to resolve differences in determining the beginning of the Hijri month. Other countries, such as Malaysia and Saudi Arabia, have developed more integrated legal systems to address similar issues.

The modernization of astronomical technology further opens up opportunities to resolve these differences. With the development of advanced tools for *hilāl* observation, such as highprecision telescopes and software based on astronomical data, the accuracy of determining the beginning of the month can be improved. However, the main challenge is not only in the technical aspects but also in the social acceptance of the results of this technology. The gap between traditional and modern approaches must be connected through dialogue involving the government, scholars, and academics.

Some previous studies have tried to explain the root of the problem and offer solutions to this polemic. This research, which is related to analyzing the arguments of the *ḥisāb* and *rukyat* methods from the perspective of contextual interpretation, aims to find the root of the problem and the source of the difference between the <code>ḥisāb</code> and rukyat methods. The findings of this study show that the *ḥisāb* method uses verses from the Qur'an and Sunnah with a contextual interpretation approach. In contrast, the rukyat method relies on verses from the Qur'an and hadith with a textual approach.¹² Research on the Interpretation of *ḥisāb-rukyat* hadiths of Muhammadiyah and its controversy conducted by Imron. This study examines the hadith related to the foundation of the *ḥisāb* method.¹³ This research discusses <code>ḥisāb</code> and rukyat related to the unity of Muslims.¹⁴ Research related to the study of the Development of *ḥisāb-rukyat* Studies in Indonesia examines *ḥisāb-rukyat*.¹⁵

Further research related to the debate in determining the new Hijri year becomes a polemic in determining the new Hijri calendar day, so the government needs solutions to overcome these

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¹¹ Muhammad Hafiz Antassalam and Dhiauddin Tanjung, "Penetapan Kalender Hijriah Menurut Ulama Muhammadiyah Dan Nahdhatul Ulama Di Indonesia," *Jurnal Edukasi Nonformal* 3, no. 2 (2022): 5.

¹² Abdur Rokhim Arhan, "Telaah Argumen Metode Hisab Dan Rukyat Dalam Perspektif Tafsir Kontekstual," *Jurnal Bimas Islam* 17, no. 1 (2024): 23–48, https://doi.org/https://doi.org/10.37302/jbi.v17i1.1166.

¹³ Ali Imron, "Pemaknaan Hadis-Hadis Hisab-Rukyat Muhammadiyah Dan Kontroversi Yang Melingkupinya," *Jurnal Studi Ilmu-Ilmu Al-Qur'an Dan Hadis* 15, no. 1 (2014): 3, https://doi.org/https://doi.org/10.14421/qh.2014.15101.

¹⁴ Zufriani, "Hisab Dan Rukyat Serta Pengaruhnya Terhadap Kesatuan Umat Islam: Analisis Dampak Dan Solusi," *Al-Qishthu: Jurnal Kajian Ilmu-Ilmu Hukum* 14, no. 2 (2016): 104, https://doi.org/https://doi.org/10.32694/qst.v14i2.1218.

¹⁵ Heri Zulhadi, "Menelaah Perkembangan Kajian Hisab Rukyah Di Indonesia," *Elfalaky: Jurnal Ilmu Falak* 3, no. 2 (2019): 223, https://doi.org/10.24252/ifk.v3i2.14154.

problems.¹⁶ Studies related to the determination of the beginning of Hijri calendar become polemic, especially when determining the beginning of Ramadan, Shawwal, and Zulhijja.¹⁷ Research applying the Jean Meeus algorithm in calculating new moon and full moon data.¹⁸ Research related to the Muhammadiyah association has made several changes in its ijtihād to determine the turn of the beginning of the new month, starting from the *imkān ar-rukyat* system, then replaced with the ijtimā' *qabl al-ghurūb* method and the last one was perfected with the *ḥisāb haqiqi wujūd al-hilāl* method.¹⁹ These studies provide an important basis but have not comprehensively addressed the formalization of a binding law to end this polemic.

This research aims to explore the formalization and supremacy of public law as a solution to end the polemics over the determination of the beginning of the Hijri calendar in Indonesia. This research analyses the role of the government, Islamic organizations, and the contribution of technology in building a legal system based on national consensus. This research focuses on the technical aspects of *ḥisāb* and *rukyat* and the importance of public law legitimacy in creating social harmony. This study will analyze the integration between sharia, astronomical technology, and positive law to increase accuracy and legitimacy in determining the beginning of the Hijri month. Moreover, this study will describe the difference between Muhammadiyah and NU as the most prominent Islamic organizations and governments in determining the beginning of the Hijri in Indonesia.

The novelty of this research lies in the holistic approach that integrates aspects of sharia, positive law, and technology to resolve this polemic. In addition, this research offers a legal model that can be applied in Indonesia, a country with the largest Muslim population in the world. This approach goes beyond previous findings by providing policy recommendations that are applicable and acceptable to all levels of society. The current situation shows that the isbat session organized by the Ministry of Religious Affairs has not effectively overcome differences in determining the beginning of the Hijri month. Although these sessions involve various parties, the results are often disputed, especially by groups with different views on <code>ḥisāb</code> and rukyat methods. This situation reflects the urgent need to strengthen the rule of law that can guide determining the beginning of the Hijri month.

This research highlights the relevance of Islamic law in the context of modern life. It makes a significant contribution to the scientific discourse on the integration of religious law and state law. This article is expected to serve as an academic and practical foundation for the government, Islamic organizations, and the wider community to create an equitable and sustainable solution jointly.

¹⁶ Alvionita Julianti and Dhiauddin Tanjung, "Unifikasi Kalender Hijriyah Umat Muslim Di Indonesia," *Astroislamica: Journal of Islamic Astronomy* 2, no. 1 (2023): 75, https://doi.org/https://doi.org/10.47766/astroislamica.v2i1.1168.

¹⁷ Arsyita Baiti Musfiroh and Muhammad Himmatur Riza, "Analysis of the Early Determination of the Kamariah Month Perspectives of Fiqh and Astronomy," *Astroislamica: Journal of Islamic Astronomy* 1, no. 2 (2022): 187, https://doi.org/https://doi.org/10.47766/astroislamica.v1i2.969.

¹⁸ Susan Venia, "Implementation of The Jean Meeus Algorithm in Calculating New Moon and Full Moon DataNo Title," *Al-Hilal: Journal of Islamic Astronomy* 6, no. 1 (2024): 55, https://doi.org/https://doi.org/10.21580/al-hilal.2024.6.1.18847.

¹⁹ Marataon Ritonga et al., "Transformasi Hisab-Rukyat Dalam Penentuan Awal Bulan Hisab-Rukyat Transformation of Hijri Month Begining," *Al-Hikmah: Jurnal Agama Dan Ilmu Pengetahuan* 21, no. 1 (2024): 53, https://doi.org/https://doi.org/10.25299/al-hikmah:jaip.2024.vol21(1).14676.

B. Method

This research used a qualitative method with a descriptive-normative approach to explore the formalization and supremacy of public law in resolving the polemics over the determination of the beginning of the Hijri month in Indonesia. A qualitative method is a scientific method aiming to understand social or human phenomena.²⁰ The descriptive approach aims to describe the factual conditions related to determining the beginning of the Hijri month, including the role of the isbat court, Islamic organisations, and community involvement. The normative approach analyzes the relevant legal framework, such as the Minister of Religious Affairs Regulation, fatwas of scholars, and other regulations governing this determination process. Moreover, the case study method is also applied to understand the implementation of isbat session in Indonesia in the context of legal and religious pluralism.

This research used secondary data sources such as legal documents, academic literature, official government reports, and theoretical studies that support the analysis. Data was collected through a comprehensive literature review of relevant journal articles, books, and regulations. We got the data by reading the related documents comprehensively to get accurate and correct data.

After collecting data, we used the content analysis method to identify patterns, themes, and relationships between sharia and public law. The Analysis were conducted critically to compare findings from previous studies and identify novelty in the context of this research. Data validity was maintained by using credible sources and triangulating information from various references. The results of this analysis are then formulated into policy recommendations that are relevant to the government and acceptable to various Islamic organizations and the wider community. This research is expected to make theoretical and practical contributions in resolving the polemics over the beginning of the Hijri month in Indonesia equitably and sustainably. Moreover, we analyzed data by determining the beginning of the Islamic month from the perspective of jurisprudence from the Qur'an and the Prophet's hadith as the primary authoritative sources in determining Islamic law. In the end, we analyze the Maslaḥaḥ of problematics of determining the beginning of the Islamic month in Indonesia to answer the statements of this research.

C. Result and Discussion

1. Methods for Determining the Beginning of the Islamic Month in Indonesia

Discussions about differences in determining the beginning and end of the lunar month always arise and become an actual issue among Muslims, especially in Indonesia. This happens when it is previously known that the *hilāl* (crescent), based on the results of *ḥisāb* (astronomical calculations), is predicted to be in a critical position, that is, it is at a certain height which, according to empirical experience is difficult to be observed conventionally. In addition, experience so far also shows that the variety of calculation methods and ḥisāb data often leads to differences in starting and ending the beginning of the Hijri month in the Muslim community in Indonesia. is based on empirical facts that occurred in 2006, which was marked by controversy between the decision of the Minister of Religious Affairs and the Muhamadiyah organization. In fact, within Nahdlatul Ulama' there was also controversy, namely the East Java PWNU's ikhbar was different from the PBNU. At

²⁰ Zuchri Abdussamas, *Metode Penelitian Kualitatif* (Makassar: Syakir Media Press, 2021), 30.

that time, the PWNU of East Java announced that 1 Syawwal 1427 H coincided with October 23, 2006, in line with the results of Muhamamdiyah's *hisāb*. Meanwhile, the PBNU declared that 1 Syawwal 1427 H coincided with October 24, 2006, in line with the isbat of the Minister of Religious Affairs. This issue is exciting to study because until now, there has been no unanimous agreement among the scholars about the method or method that should be used.

The *hisāb* and *rukyat* methods are two approaches to understanding and practicing the revelation texts from the Qur'an and hadith related to determining the first day of the Hijri month.²¹ Some scholars stipulate that the rukyat method (seeing the *hilāl* directly) should be used because that is the method used by the Prophet. At the same time, some other scholars justify using *hisāb* (astronomical calculations) because of the verses of the Qur'an that can be used as a basis for *hisāb*. In the Indonesian context, the reference to *hisāb* science or astronomical calculations as the basis and footing in determining the beginning of the lunar month is represented by the Muhammadiyah organization. Initially, Muhammadiyah used the theory of *hisāb* hakiki with *imkan rukyat* criteria. Muhammadiyah switched to the ultimate *hisāb* with the *ijtimak qab al-ghurub* criterion in its development. Along with the times, Muhammadiyah switched to the theory of *wujud al hilāl* as a middle ground between the right *hisāb* with *imkan rukyat* criteria and the right *hisāb* with *ijtimak qab al-ghurub* criteria. This was confirmed at the 26th National Conference of Majlis Tarjih Muhamadiyah in Padang in 2003 M/1424 H.

One cause of the low success rate of *rukyatul hilāl* in this observatory is its relatively high rainfall, which reaches an average of 354 mm per year. This rainfall is strongly influenced by the observatory's latitude and geographical position, which is flanked by the sea and mountains.²² Scholars' disagreement on this issue began with the development of science and technology in astronomy, which is what it is today. Various opinions about the method or methods that should be used in determining the beginning of the lunar month can be traced in various *fiqh* books that are familiar and popular in the pesantren world. *Hisab 'urfi* in Indonesia is represented in the above and *"Asapon"* systems. At the same time, the *hisab haqiqi* method in Susiknan Azhari's book is divided into two major schools, namely the school that adheres to *ijtimak* alone and the school that adheres to the position of the hilāl above the horizon.²³

In addition to the two methods (*rukyat* and *ḥisāb*) as the basis for determining the beginning of the lunar month, there are two variants in the *rukyat* community itself. Some use *rukyat hilāl bi al-fi'li* (seeing the appearance of the crescent directly) as a guideline in determining the beginning of the lunar month. They interpret the word '*rukyat*' found in the Prophet's hadith by seeing with the naked eye (not by astronomical calculations). In the Indonesian context, this view is represented by Nahdlatul Ulama' (NU) Organization, Hizbut Tahrir Indonesia (HTI) –Hizbut Tahrir Indonesia referred to in this dissertation, is before the government decree on the existence of HTI as a banned organization in Indonesia, and several other religious organizations. However, suppose Nahdlatul Ulama'(NU) uses the reference *ikhtilāf al-mațāli'* (local or national *ru'yat*), while Hizbut Tahrir

²¹ Muhammad Nurkhanif, "Nalar Kritis Hadis Rukyah Al-Hilal: Kajian Hermeneutika Dan Dekonstruksi Hadis," *Riwayah: Jurnal Studi Hadis* 4, no. 2 (2018): 265, https://doi.org/10.21043/riwayah.v4i2.4625.

²² Machzumy, "The Effect of Latitude on Success Rate of Rukyat Hilal at Observatorium Lhoknga Aceh," *Syarah: Jurnal Hukum Islam* 8, no. 2 (2019): 79.

²³ Muhammad Ilham Aziz and Ahmad Musta'id, "Islamic Astronomy of Abbasid Era (750-1258 AD)," *Journal of Islamic History and Manuscript* 1, no. 1 (2022): 35, https://doi.org/https://doi.org/10.24090/jihm.v1i1.5944.

Indonesia (HTI) uses *wihdat al-mațla'* (international rukyat). In that case, the view of *ikhtilāf al-mațāli'* means that each country has absolute authority to start and end the beginning of the lunar month. This is stated in the Pengusrus Besar Nahdlatul Ulama's decision on the guidelines for organizing *rukyat bi al-fi'li* number 311/A.II.04.d/1994. Thus, the Indonesian state does not need to be orientated to other countries. In contrast to the concept of *ikhtilāf al-mațāli'* as has become the official decision of the Nahdlatul Ulama (NU) organization, the concept of *wihdat al-mațla'* as promoted by Hizbut Tahrir Indonesia (HTI) provides the opposite understanding, namely international *rukyat* or global *rukyat*. Leaflet (Nasyrah) dated 25 Sha'ban 1419 H / December 14, 1998, HTI confirmed the official stance of its organization by stating: 'The valid rukyat (*mu'tabar*) is *rukyat* by eye. *Hisāb* cannot be used as a basis if rukyat is not proven by eye, because *hisāb* has no shar'i value in determining fasting and breaking the fast. This is because the shar'i reason for fasting and Eid is none other than *rukyat hilāl bi al-'ain* (seeing the crescent moon with the eye). Ironically, both views (*ikhtilāf al-mațāli' and wihdat al-mațla'*) have the same footing, namely the Prophet's hadith.

Along with the rapid development of science and technology, especially in astronomy, various impacts and consequences arise in implementing Islamic teachings, including in worship. Modification and improvisation in the application of religious teachings become an inevitable necessity. One example is in the method of determining the beginning of the lunar month, which is an important basis for determining the time of worship such as Ramadan and Eid al-Fitr. The rukyat method, one of the legal ways in Islamic law to determine the beginning of the lunar month, has long been practiced by Muslims by observing the new moon at sunset (*ghurūb al-syams*). This practice not only reflects adherence to Sharia tradition but also shows how Muslims adapt to changing times, where the role of astronomy is increasingly significant in providing greater certainty and accuracy in determining the time of worship.

2. Determination of the Beginning of the Islamic Month in the Perspective of Jurisprudence

As the primary authoritative sources in determining Islamic law, the Qur'an and the Prophet's hadith contain various *al-nuṣūṣ al-shar'iyyah*, which serve as guidelines for preparing the Hijri calendar. The Hijri calendar not only functions as a time reference but also closely relates to the implementation of various rituals (procedures) of worship required in Islam. Therefore, the problem of determining the beginning of the lunar month is of high urgency and significance because it is nuanced *'amar ilahiyyah*, as contained in authoritative sources. With a dimension that touches the shar'i aspect, the determination of the Hijri calendar is not only a tool in everyday life but also a basis for the implementation of worship related to time.

The issue of implementing the Hijri calendar is present in the discourse of the *fuqahā* as part of *al-masāil al-fiqhiyyah* (fiqh problems) which requires legal istinbat from shar'i arguments. In this context, the *fuqahā* sought legal and legitimate guidance to help *mukallaf* (people burdened with the law) carry out various religious obligations. The Hijri calendar is used to determine the time aspect of various activities, such as the '*iddah* period for women, zakat *haul*, Ramadan fasting, Eid prayers, Hajj, etc. Thus, the Hijri calendar becomes an important instrument that integrates the values of sharia in the practice of Muslim life, ensuring that every act of worship is carried out by the provisions stipulated by Islamic law.

Based on the relevant shar'i arguments, the jurists, as explained by Ibn Rusyd, have reached agreement on two main points in the determination of the Hijri calendar. First, the span of one month in the lunar calendar calculation can consist of 29 days or 30 days, depending on the results of the hilāl observation. Secondly, the appearance of the successfully sighted *hilāl* becomes the primary reference for determining the boundaries of the beginning and end of the month in the Hijri calendar. This agreement reflects the importance of the hill as a time marker that becomes the basis for determining various religious activities related to the lunar calendar, such as the beginning of Ramadan, *Eid al-Fitr, Eid al-Adha*, and the implementation of other worship services.²⁴ The shar'i proofs include the following hadith of the Prophet:

"Narrate to us Adam, narrate to us Shu'bah, narrate to us al-Aswad bin Qays, narrate to us Sa'id bin 'Amr, that he heard Ibn 'Umar r.a., from the Prophet (PBUH) that he said: 'Verily we are an ummi (illiterate) ummah. We cannot write and we cannot count. One month is so, so, and so. He bent his thumb on the third (meaning 29 days), and a month is so, so, and so, i.e. a perfect 30 days".²⁵

"Narrated 'Abdullah ibn Maslamah, from Malik, from Nafi', from 'Abdillah ibn 'Umar, r.a. The Messenger of Allah (SAW) mentioned the month of Ramadan and said: 'Do not fast until you see the moon, and do not break the fast until you see it'. If the clouds prevent you from seeing it, then estimate it".²⁶

Although the science of *hisāb* or astronomy has an important position as one of the methods in determining the beginning of the lunar month, the acceptance of this method among the *fuqahā* is divers. Most of them recognize the existence of hisāb as a reference, although not all consider it was valid. This divergence of views created a significant debate dynamic, especially among scholars of the various madhhabs (Islamic schools of thought). One of the most prominent madhhabs in this discussion is the Shafi'i groups, where several fuqahā, such as al-Ramli and al-Khatib al-Sharbini, explicitly rejected the validity of *hisāb* as a method of determining the beginning of the lunar month. This rejection is based on their view that the direct rukyat method is the only approach considered by Sharia principles.

In the view of the Shafi'iyyah jurists, the opinion of hisāb experts is not considered a valid reference because they consider the rukyat method to have a more substantial and more direct basis in shar'i evidence. Al-Ramli and al-Khatib al-Sharbini, for example, explicitly reject the existence of astronomy in this context, arguing that the hisāb method does not fulfil the sharia criteria required for the determination of the beginning of the month. As stated in the following rule:

²⁴ Abū al-Wālid Muḥammad Ibn ar-Rushd, Bidāyah Al-Mujtahid Wa Nihāyah Al-Muqtaşid (Beirūt: Dār al-Kitāb al-'Arabī, 2004), 65.

 ²⁵ Muhammad Ibn Isma'il Al-Bukhari, *Sahih Al-Bukhari*, Juz II (Beirut: Dar Ibn Kasir, 1987), 675.
²⁶ Al-Bukhari, 191.

لاَ عِبْرَةَ بِقَوْلِ الْحُسَّابِ

"The view of the hisāb experts cannot be used as a reference."27

The view of the invalidity of the astronomical method in determining the beginning of the lunar month, it turns out, is corroborated by contemporary *fuqahā*, Wahbah al-Zuhayli, with his statements and arguments as follows: "Determining the appearance of the new moon cannot be based on the forecasts of hisāb experts who estimate the circulation of the moon, either for themselves or for others. This is because *al-Shari*' (Allah) attributes the obligations of fasting, Eid and Hajj to the rukyat of the *hilāl* (sighting of the moon), not the appearance of the *hilāl*. Therefore, what is meant by His words is that doing good deeds by referring to astronomical calculations cannot be justified even if it is the truth."²⁸

Some jurists have different views on the legality of *hisāb* in determining the beginning of the lunar month. They consider *hisāb* science valid and can be used as a reference, both in knowing the appearance of the new moon and its absence, as a relevant basis for determining the beginning of the month. One of the figures from the Shafi'iyyah school who supports the use of *hisāb* is al-Rafi'i, as in the following description: "Regarding the statement *'min țulū' al-shams*,' according to al-Rafi'i (may Allah have mercy on him), because the *hisāb* expert can predict the day, and calculate the time. al-Rafi'i reinforces the first opinion that shar'i-ly, the beginning of the day, is based on the sun's rising."²⁹ This view shows that the science of hisāb has a sufficient basis for making public policy regarding determining the beginning of the lunar month, especially in situations where the *rukyat* method is impossible.

The use of $his\bar{a}b$ as the basis for determining the beginning of the lunar month in the era of Prophethood and the Companions was a reality that was impossible to do, considering that the method of astronomical calculation had never been used. However, in line with the development of Muslims' knowledge of this science, at the time of the $T\bar{a}bi'\bar{n}$, the view emerged that if clouds covered the new moon, the determination of the beginning of the lunar month could refer to $his\bar{a}b$ associated with the apparent movement of the moon and sun objects.³⁰ This view was reported by Mutarrif bin al-Shakir, a jurist from the generation of kibār tābi'īn (third generation Muslims, who had met the companions of the Prophet).

Later developments, the *hisāb* method became more significant in determining the beginning of the lunar month. This method is no longer limited to use in cloudy weather conditions but is also recognized for its validity in clear weather conditions. Ibn Hajar al-Haitami, one of the figures from the Shafi'i school of thought, argued that the testimony of the *rukyat al-hilāl* must be canceled if the results do not match the calculations and criteria that have been agreed upon by hisāb. This opinion shows that al-Haitami gives high legitimacy to the hisāb method as a more objective evaluation tool than the rukyat method, especially when there is a discrepancy between visual observations and scientific calculations.

²⁷ Abu Bakr Utsman bin Muhammad bin Shatha Al-Bakry, *I'anat Al-Thalibin*, Juz II (Beirut: Dar al-Kutub al-Ilmiyyah, n.d.), 216.

²⁸ Wahbah Al-Zuhaylī, Al-Fiqh Al-Islami Wa Adillatuh, Jilid 4 (Damaskus: Dar al-Fikr, 1998), 600.

²⁹ Shihabuddin Abu al-'Abbas Ahmad bin Ahmad bin Salamah al-Qalyubi Al-Misri, *Hashiyat Qalyubi Wa* 'Umayrah 'ala Sharh Al-Mahalli 'ala Minhaj Al-Thalibin, Juz IV (Dar al-Fikr, n.d.), 101.

³⁰ Ibn Daqiq Al-'Id, Ihkam Al-Ahkam, Juz I (Beirut: Dar al-Kutub al-Ilmiyyah, n.d.), 205.

Similar views were also expressed by several other figures of the Shafi'i school, such as al-Subki, al-'Abbadi, and al-Qalyubi. All three are of the opinion that the testimony of *rukyat al-hilāl* should be rejected if *hisāb* shows the impossibility of the appearance of the *hilāl*, even if the testimony comes from one or two people who claim to have seen it. Interestingly, compared to al-Haitami, the views of these three jurists are more emphatic in placing hisāb as the primary reference. They do not require agreement among *hisāb* scientists but base the decision on the results of accurate calculations from *hisāb* experts, as in the following description: "The view of al-Subki regarding the attempt to adhere to the statements of the *hisāb* experts must be rejected. I said al-Subki's view was also rejected by the *mutaakhkhirin fuqahā* who followed him, including Ibn Hajar, al-Ramli, as in *Sharh al-Minhaj*, while in *Fatawa al-Shihab*, Imam al-Ramli, al-Kabir, al-Shafi'i: Imam al-Subki was asked: 'If there is evidence in the form of a witness who successfully sighted the new moon on the thirtieth night of the lunar month, while the *hisāb* expert thinks that the possibility of sighting the new moon on that night is not possible, then the view of the hisāb expert should be referred to because the *hisāb* expert is *qați* (certain) while the testimony is *Zannī*."³¹

The argument for the validity of the $his\bar{a}b$ method or astronomy as a reference in determining policies related to the beginning of the lunar month is based on its ability to bring convenience, certainty, and confirmation in the preparation of the Hijri calendar, as described in the following statement: "When a vowed person says the phrase 'a year', it means based on calculations based on the appearance of the new moon, because the meaning of a year' in sharia according to the calculations of the *hisāb* experts is 354 days."³²

This method offers a systematic scientific approach, allowing accurate calculations of the position of the new moon and the movement of celestial bodies. In addition, the existence of *hisāb* provides a practical solution to the problems that often arise in traditional *rukyat* methods, such as the limitations of human vision or unfavorable weather conditions. By using *hisāb*, Muslims can organize their worship schedules in a more planned manner and avoid potential differences in the timing of worship, especially collective ones such as the beginning of Ramadan, *Eid al-Fitr*, and *Eid al-Adha*. This fact shows that *hisāb* is not only an alternative but also a valid and relevant instrument to answer the needs of the times by combining the Shari'a with advances in technology and science.

In addressing the contradictory views among the fuqahā, as described above, Ibn Surayj chooses the middle way by offering a solution that accommodates both views. His approach refers to the Prophet's statement regarding the meaning of *"faqdurū lahu"* which is then interpreted by Ibn Surayj as a guide in determining the provisions related to the determination of the beginning of the lunar month, as in the following description: "Ibn al-'Arabi quoted from Ibn Surayj, that the meaning of khitab *"faqdurū lahu"* is addressed to certain communities that have scientific competence related to astronomy, while *"fa akmilū al-'iddah"* is addressed to the general public. Therefore, according to Ibn al-'Arabi, the obligation in determining the beginning of the lunar month is situational and conditional (can be based on astronomical calculations, and can also be using ikmal or perfecting the count of the month to 30 days).³³

³¹ Muhammad Amin, *Radd Al-Mukhtar 'ala Al-Durr Al-Mukhtar*, Juz III (Riyāḍ: Dar al-Alam al-Kutub, 2003), 3651.

³² Ahmad Shihabuddin bin Hajar al-Haitami, *Tuhfat Al-Muhtaj Fi Sharh Al-Minhaj*, Juz II (Beirut: Dar al-Kutub al-Ilmiyyah, n.d.), 310.

³³ Ibn Hajar Al-'Asqalani, Fath Al-Bari 'ala Sharh Sahih Al-Bukhari, Juz VI (Beirut: Dar al-Fikr, n.d.), 148.

From this description, Ibn Surayj attempted to harmonize the methods of *rukyat* and *hisāb*, emphasizing that both have valid values in different contexts. He considers that rukyat remains the primary reference in determining the new moon. However, *hisāb* can provide confirmation and certainty, especially in favorable conditions or when there is doubt in the observation. Thus, Ibn Surayj tried to bridge the differences of views in a more flexible way and in accordance with the principles of Islamic law that promote the benefit of the people.

In order to find common ground (*nuqtah mushtarakah*) between the two methods (*rukyat* and *ḥisāb*), some other jurists proposed the *imkān* criterion as the standard and reference barometer in determining the beginning of the lunar month. The expression of the *fuqahā* a is illustrated as follows: "However, when astronomical experts state that it is impossible to sight the new moon because it has not been sighted above the horizon in any country, then it is obligatory to reject the testimony of the person who saw the new moon. This is because, based on science, it is declared impossible. In fact, under these conditions, there is no need to search for the *hilāl*, no need to go to the shar'iyyah court, and no need to seek a fatwa from an authoritative religious institution about the person who witnessed the *rukyat al-hilāl*.³⁴

This statement illustrates the moderate approach taken by some jurists in finding common ground between *rukyat* and *hisāb* methods in determining the beginning of the lunar month. They propose the imkan criterion as a barometer that can be used as a standard reference, considering whether it is astronomically possible to see the *hilāl*. Thus, if the *hisāb* experts state that the *hilāl* cannot be seen above any horizon, then the rukyat testimony must be rejected, and the search for the hilāl is unnecessary. This approach promotes harmony between religion and science by making scientific certainty a solid basis for legal decisions. This leads to a more systematic practice and avoids confusion or discrepancies between visual observations and astronomical calculations.

3. *Maṣlaḥah* Analysis of Problematics of Determining the Beginning of the Islamic Month in Indonesia

All Islamic laws established by Allah, whether in the form of commands or prohibitions, always aim to realize benefits for humanity. This benefit includes worldly aspects and can be felt directly or indirectly. Most scholars agree that every provision of sharia contains wisdom and benefits, both those that can be immediately felt at the time of implementation and those that will only be felt in the future. This confirms that Islamic law aims to regulate human relations with God, build social harmony, maintain the balance of nature, and provide sustainable goodness. The concept of maşlaḥah is the core of Islamic law, which always considers the benefits and avoids harm, thus making Islamic law relevant and applicable in various conditions of time and place.

The definition of *maṣlaḥah* etymologically is the same as benefit in terms of lafaz and meaning. *Maṣlaḥah* also means a job with benefits.³⁵ While the definition of *maṣlaḥah* is in terminology, several definitions are put forward by scholars of uṣūl fiqh, but all of these definitions contain the same essence. al-Gazali, as quoted by Nasrun Haroen in his book, stated that *maṣlaḥah* is taking benefits and rejecting *madarrah* (harm) to maintain the objectives of Shara'.³⁶ Meanwhile, Wahbah al Zuhayli argues that *maṣlaḥah* is an effort to do something that brings benefits and prevents

³⁴ Yusuf Al-Qardhawi, *Fatawa Mu'Ashirah*, Juz II (Kairo: Dar al-Qalam, 2005), 221.

³⁵ Nasroen Harun, Usul Fiqh, Jilid I (Jakarta: Logos Wacana Ilmu, 2001), 114.

³⁶ Harun, 114.

madarrah (harm) in order to achieve al-Qawāid al-Khams (five basic principles), namely: ḥifz al-dīn, ḥifz al-nafs, ḥifz al-aql, ḥifz al-nasl, and ḥifz al-māl.³⁷

In the context of determining the beginning of the month of Ramadan 1446 AH/2025 AD, it is predicted that there will be variations in the method of determining the beginning of the Islamic month in Indonesia. This difference can be seen from the different approaches between Nahdlatul Ulama (NU) and Muhammadiyah.³⁸ NU uses the *rukyat bil fi'li* method by considering three main criteria, namely *istiḥālah rukyat* (the impossibility of the *hilāl* being seen), *imkan rukyat* (the possibility of the *hilāl* being seen based on specific parameters), and *qath'i rukyat* (the certainty of sighting the *hilāl* based on valid rukyat reports). Meanwhile, Muhammadiyah uses a ḥisāb approach with two main criteria, namely the *Kalender Hijriah Global Tunggal* (KHGT), which refers to global standards in determining the beginning of the month, and *wujūdul hilāl*, which is a method that determines the beginning of the month when the hilāl is above the horizon even though it cannot be seen.

From here, the author predicts that there will be variants in determining the beginning of the Islamic month in Indonesia. This is based on several *qarīnah* (indicators) as follows:

- a. Muhamamdiyah organization has issued an edict on the determination of the beginning of the month of Ramadan 1446 H/2025 M, which was delivered by the Secretary of the Muhamadiyah Central Leadership, Sayuti, in a press conference held through the YouTube account of the PP Muhamadiyah channel on Wednesday, February 11, 2025. The edict's core point is that the beginning of Ramadan coincides with March 1, 2025, with the method of *ḥisāb wujūdul hilāl hakiki*. So, on March 1 (at sunset), the position of the *hilāl* was already above the horizon, and ijtimak occurred precisely at 07:44.
- b. Nahdhatul Ulama, together with the Government of the Republic of Indonesia, will determine 1 Ramadan 1446 H/2025 M through an isbat session which will be held at the end of the month of Sha'ban, namely February 28, 2025, in the evening. Of course, this isbat session will be carried out based on the results of hilāl monitoring conducted by a team of observer that has been scattered at several points in Indonesia. However, referring to the existing astronomical data, the author predicts there will be a potential controversy in determining the beginning of the month of Ramadan 1446 H or 2025 M between two religious organizations in Indonesia, NU and Muhamadiyah. This is based on the MABIMS criteria that the entry of the new moon according to the MABIMS criteria is the height of the moon or topocentric height (*irtifā' hilāl*) of at least 3 °, while the distance between the moon and the sun (elongation) must be 6.4 °.

Based on the data above, there are potential differences in the determination of the beginning of Ramadan 1446 AH/2025 AD between Muhammadiyah and Nahdlatul Ulama (NU) and the Government of the Republic of Indonesia. Muhammadiyah has set 1 Ramadan 1446 AH to fall on March 1, 2025, based on the *ḥisāb wujūdul hilāl hakiki* method, on the basis that on February 28, 2025, at sunset, the *hilāl* was already above the horizon. Meanwhile, NU and the government will set

³⁷ Wahbah Al-Zuhaylī, Ushul Al-Fiqh Al-Islami, Juz II (Beirut: Dar al-Fikr, 1990), 756.

³⁸ "Sidang Isbat Dan Prediksi Perbedaan Awal 1 Ramadan 1446 H," Universitas Negeri Surabaya, 2025, https://pendidikan-sains.fmipa.unesa.ac.id/post/sidang-isbat-dan-prediksi-perbedaan-awal-1-ramadan-1446-h.

the beginning of Ramadan through an isbat session on the evening of February 28 2025, based on the results of *rukyatul hilāl*. Taking into account the MABIMS criteria, which requires a minimum hilāl height of 3° and an elongation of at least 6.4°, there is a possibility of different results in determining the beginning of Ramadan, considering that in some parts of Indonesia, the prediction of *hilāl* height is still below the minimum limit of the MABIMS criteria.

The difference in methods between Muhammadiyah and Nahdlatul Ulama (NU) in determining the beginning of Ramadan reflects a fundamental difference in approach. Muhammadiyah uses hisāb wujūdul hilāl, which prioritizes the accuracy of astronomical calculations. At the same time, NU relies on rukyat with direct observation of the *hilāl*, which is considered more by the sunnah of the Prophet Muhammad. Muhammadiyah sees *hisāb* as an efficient modern method, while NU considers *rukyat a shar'i* practice with traditional legitimacy.

In addition, differences in the methods of determining the beginning of the Islamic month, through *hisāb* and *rukyat*, often lead to variations in the implementation of the beginning of Ramadan, *Eid al-Fitr*, and other months in Indonesia. Although based on their respective shar'i and scientific foundations, these variations have significant social implications. The disagreement in determining the beginning of the month often creates confusion, disturbs people's psychology, and even has the potential to break social harmony. Determining the beginning of Ramadan is not just a private act of worship, but it also has a robust social dimension. Togetherness in starting and ending the Islamic month will be much more beneficial and strengthen the solidarity of Muslims. In this context, simultaneously and together performing worship brings a broader message of *ukhuwwah*.

If associated with the concept of maṣlaḥah in Islamic law, then this togetherness is in line with the fiqh rule which states that:

الْمَصْلَحَةُ الْعَامَةُ أَقْوَى مِنَ الْمَصْلَحَةِ الْخَاصَةِ

"The public good must take precedence over the individual good."

In the context of rukyat and *ḥisāb*, this means that every decision taken by religious authorities needs to consider its social impact, not merely the technical results of the *ḥisāb* or *rukyat* method. By upholding this principle, it is hoped that differences can be minimized and Muslims can carry out their worship in peace, togetherness, and harmony:

The rules of jurisprudence can be strengthened by various fuqahā statements as explained below: "Obey the rule in seven things: the use of currency (*dirham/dinar*), measures, scales, rulings, *Hajj*, *Jumu'ah*, determination of holidays, and *jihad*."³⁹ Then, the fiqh rules put forward by Wahbah Al-Zuhayli:

إِذَا رَجَّحَ الْحَاكِمُ رَأَيًا ضَعِيفًا صَارَ هُوَ الْحُكْمَ الْأَقْوَى

"When the judge (government) favours a *dhoif qaul* then that *qaul* is actually elevated to the status of an *aqwa* (strongest) opinion."⁴⁰

Also, the following statements of scholars: "Ultimately, the public is obliged to obey the judge's decision, while the judge is responsible before Allah for his *ijtihad* and judgment. If, in his view, the

³⁹ Abu Abdillah Muhammad bin Ahmad bin Abu Bakar bin Farh Al-Anshari Al-Khazraji Al-Andalusi Al-Qurthubi, *Tafsir Al Qurthubiy*, Juz V (Beirut: Dar al-Fikr, 2009), 249.

⁴⁰ Wahbah Al-Zuhaylī, Al-Fiqh Al-Islami Wa Adilatuhu, Juz I (Damsyik: Dar al-Fikr, 1984), 167.

witness testimony establishing the existence of the *hilāl* is correct, then he decides that the *hilāl* has been sighted, even if the *hisāb* experts deny it. On the other hand, if he thinks that the calculations of the hyssop experts that establish the existence of the new moon are correct, then he also decides that the new moon has been sighted, even if it is denied by those who claim to have seen it directly. Similarly, the judge's decision to deny the new moon's existence applies the same principle. The judge's decision must be obeyed by those who are not direct observers and are not his experts, as agreed upon by the scholars. However, those who are direct observers and hisāb experts are obliged to act based on their knowledge. And Allah knows best".⁴¹

These fiqh opinions provide an important basis for the role of government authority or judges in sharia decisions, especially regarding issues of a public nature such as determining the beginning of the lunar month, Friday prayers, holidays, and the use of scales and currency. Based on the quoted fiqh rule, ' $at\bar{i}$ ' \bar{u} as-sultān fī sab'ah', obedience to the leader includes matters that are strategic in maintaining the social and religious order of the *ummah*. This principle emphasizes that obedience to government decisions is not merely administrative but also has a strong Sharia basis. Even when the government or judge adopts an opinion *fiqh* classified as weak (*qaul dhaif*), the decision is still considered a strong opinion (*aqwā*) after it is formalized. This shows the position of the ruler's ijtihad as a collective legal solution that must be respected for the benefit of the people.

These opinions also highlight the responsibility of the judge in using his *ijtihād*, especially when dealing with differences in views between *rukyat* witnesses and *ḥisāb* experts. In this case, the judge is accountable to the community and Allah for his decision. The judge's decision, although it may contradict one of the parties (either the rukyat witnesses or the *ḥisāb* experts), is still binding for the wider community based on the agreement of the scholars. However, this paper also allows those with direct knowledge, such as *hilāl* observers and *ḥisāb* experts, to still act according to their knowledge. This approach demonstrates the balance between collective authority and respect for individual capacity in sharia. Ultimately, this principle aims to maintain social harmony and avoid

D. Conclusion

The determination of the beginning of the Islamic month in Indonesia remains a subject of scholarly disagreement, primarily between the *rukyat* (direct moon sighting) and *hisāb* (astronomical calculation) methods. While some scholars uphold rukyat as the method practiced by the Prophet Muhammad, others favor *hisāb* due to its scientific precision. There are some variants of determining the beginning of the Islamic month in Indonesia based on several indicators) as follows. Muhamamdiyah organization has issued based on *hisāb wujūdul hilāl hakiki*. At the same time, Nahdhatul Ulama, together with the Government of the Republic of Indonesia, will determine 1 Ramadan through an isbat session, which will be held at the end of the month of Shaban. This divide is evident in the differing stances of religious organizations, such as Nahdlatul Ulama (NU) advocating local *rukyat (ikhtilāf al-mațāli'*) and Hizbut Tahrir Indonesia (HTI) supporting international *rukyat (wiḥdat al-mațāli'*). Despite these differences, advancements in astronomical technology have made this increasingly relevant, prompting discussions on its legitimacy within Islamic jurisprudence. While most *fuqahā* still consider *rukyat* the preferred method due to its direct reliance on *hilāl* observation, certain Shafi'i scholars, including al-Haitami and al-Subki, acknowledge hisāb as valid, mainly when calculations confirm the impossibility of *hilāl* sighting. This

⁴¹ Musa Syahin Lasyin, Fath Al Mun'im Fī Syarh Sahih Muslim (Kairo: Dar al-Syuruq, 2020), 189.

demonstrates a growing acceptance of scientific methodologies in aligning religious observances with objective astronomical findings.

From the *maşlaḥah* (public interest) perspective, ensuring social and religious harmony is paramount in resolving disputes over the Islamic calendar. Differences in determining the start of the month can lead to communal confusion and undermine unity among Muslims. The application of *maşlaḥah*, emphasizing collective welfare over individual opinions, provides a practical framework for mitigating conflicts and fostering cohesion. Religious authorities must consider the broader social impact when issuing rulings, and in cases of disagreement, binding governmental decisions should be respected. This approach, rooted in Islamic legal principles, prioritizes the unity of the ummah while balancing institutional authority with individual religious perspectives. Ultimately, this study underscores the importance of integrating fiqh analysis, astronomical technology, and the maşlaḥah principle to formulate an inclusive and contemporary model for determining the Islamic lunar calendar.

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Holis, et al.

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Al-Hilal: Journal of Islamic Astronomy