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Reforming Lunar Calendar in Indonesia: The Academic Legacy of Muhammad Basiuni Imran

Zulfian Wanandi,[1*] Suhardiman,[2] Mowafg Abrahem Masuwd[3]

[1] Ushuluddin Islamic Boarding School Singkawang, Indonesia
[2] Institut Agama Islam Negeri Pontianak, Indonesia
[3] University of Zawia, Libya
* Corresponding Author, Email: zulfian2710@gmail.com

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Abstract

This study examines Muhammad Basiuni Imran's views on determining the beginning of the lunar month as outlined in his book entitled *Ḥusn al-Jawāb 'an Itsbāt al-Ahillah bi al-Ḥisāb*. He emphasized that differences between *rukyat* (moon sighting) and *ḥisāb* (astronomical calculation) should not divide Muslims. Imran argued that using *ḥisāb* to determine the start of fasting and Islamic holidays is valid in Islam, as it offers a systematic and reliable approach. This library study uses primary and secondary sources, with data collected through interviews and documentation and analyzed using a descriptive-analytical method. The study reveals two key findings. *First*, Muhammad Basiuni Imran favored *ḥisāb* over *rukyat* for determining the lunar month, as it provides greater accuracy, such as precisely locating the crescent and setting prayer times using clocks. *Second*, his views were shaped by his teachers, including Rashid Rida from Egypt, Ahmad Khatib Al-Minangkabawi, and Shaykh Tahir Jalaluddin, a pioneer of *ḥisāb* in the Nusantara.

Keywords: Muhammad Basiuni Imran, Islamic calendar, *ḥisāb*, *rukyat*, reform

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Penelitian ini mengkaji pandangan Muhammad Basiuni Imran tentang penentuan awal bulan hijriah sebagaimana dijelaskan dalam kitabnya *Ḥusn al-Jawāb 'an Itsbāt al-Ahillah bi al-Ḥisāb*. Ia menekankan bahwa perbedaan antara rukyat dan *ḥisāb* tidak boleh memecah belah umat Islam. Imran berpendapat bahwa penggunaan ḥisāb untuk menentukan awal puasa dan hari raya dalam Islam adalah sah, karena menawarkan pendekatan yang sistematis dan dapat diandalkan. Penelitian ini merupakan studi kepustakaan yang menggunakan sumber primer dan sekunder, dengan metode pengumpulan data melalui wawancara dan dokumentasi, serta dianalisis secara deskriptif-analitis. Hasil penelitian ini mengungkapkan dua temuan utama. *Pertama*, Muhammad Basiuni Imran lebih mengutamakan *ḥisāb* dari pada rukyat dalam penentuan awal bulan Hijriah karena memberikan akurasi lebih tinggi, seperti menentukan posisi hilal secara tepat dan menetapkan waktu salat. *Kedua*, pandangannya dipengaruhi oleh para gurunya, termasuk Rashid Rida dari Mesir, Ahmad Khatib Al-Minangkabawi, dan Tahir Jalaluddin, salah satu pelopor ilmu *ḥisāb* di Nusantara.

Kata Kunci: *Muhammad Basiuni Imran, kalender Islam, ḥisāb, rukyat, reformasi*

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A. Introduction

During the middle of the twentieth century, the highest level of Islamic study could only be achieved in Mecca, then in Cairo.[1] Not only in Islamic studies, but also the study of astronomy, cannot be separated from the existence of a network of scholars of Mecca (Arabian Peninsula). This is also followed by an Islamic astronomy expert network by Indonesian astronomy scholars, such as Muhammad Manshur al-Batawi. In historical context, his monumental work, *Sullam al-Nayyirain*, results from the *riḥlah 'ilmiyyah* (academic journey) he carried out in the Arabian Peninsula. Whether acknowledged or not, the development of astronomical thought in Indonesia has been significantly influenced by the astronomical ideas originating from the Arabian Peninsula, particularly from regions such as Egypt. Consequently, the historical trajectory of astronomy in Indonesia is intrinsically linked to the history of Islam in the region, as it is a product of scholarly networks that shaped Islamic knowledge in the archipelago.[2]

In Indonesia, astronomy has developed, especially in various Islamic boarding schools, especially in the islands of Java and Sumatra. Astronomers in Indonesia have also developed many books in calculation methods, most of which are *maṭba'* (epoch) and *markaz*, adapted to the author's residence. Starting from the 16th century, the Middle East has become a favorite place for several students from the archipelago. And the existence of Nusantara scholars who have made an intellectual journey to the Middle East comes from various regions, for example, from Aceh, namely Nuruddin ar-Raniri (d.1658), Abd Ar-Ra'uf as-Singkil (d.1693), Muhammad Nawawi al-Bantani (d.1897), Khatib al-Miangkabawi (d.1916), Abd ash-Shamad al-Palimbani (d.1789), and Muhammad Arsyad al-Banjari (d.1812).[3] The phenomenal scholar, Ahmad Dahlan (d.1913), founded one of the largest Islamic organizations in Indonesia, Muhammadiyah. In addition, there was also Hasyim Asy'ari (d.1947), the founder of the largest Islamic organization in Indonesia, Nahdlatul Ulama.[4]

West Kalimantan has produced at least two prominent scholars who exemplify the connection between the Middle Eastern scholarly network and the West Kalimantan region. These scholars are Ahmad Khatib as-Sambasi, recognized as the pioneering figure of the *Qodariyya wa Naqsabandiyyah* sufi order, and Muhammad Basiuni Imran.[5] Muhammad Basiuni Imran was a prominent and influential scholar from West Kalimantan. During his lifetime, the Sambas region experienced a remarkable period of scientific advancement and modernization. The vibrant development in both scientific and religious spheres led to the area being recognized as the Porch of Mecca.

He lived contemporaneously and simultaneously with several other Indonesian reformers, Ahmad Dahlan and Hasyim Asyari, was just one of the national figures of his time who played a more

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[1] Ahmad Izzuddin, *Ilmu Falak Praktis; Metode Hisab-Rukyat Praktis Dan Solusi Permasalahannya* (Semarang: Pustaka Rizki Putra, 2012).

[2] Ahmad Izzuddin, *Fiqih Hisab Rukyah* (Jakarta: Erlangga, 2007).

[3] Wendi Parwanto, "Konstruksi Dan Tipologi Pemikiran Muhammad Basiuni Imran (1885-1976) Sambas, Kalimantan Barat Dalam Literatur Tafsir," *Substantia: Jurnal Ilmu-Ilmu Ushuluddin* 21, no. 1 (April 1, 2019): 61, https://doi.org/10.22373/substantia.v21i1.4476.

[4] Didik M Nur Haris and Rahimin Affandi Abd Rahim, "Pemikiran Keagamaan Muhammad Basuni Imran," *Al-Banjari : Jurnal Ilmiah Ilmu-Ilmu Keislaman* 16, no. 2 (December 6, 2017): 1, https://doi.org/10.18592/al-banjari.v16i2.1464.

[5] Parwanto, "Konstruksi Dan Tipologi Pemikiran Muhammad Basiuni Imran (1885-1976) Sambas, Kalimantan Barat Dalam Literatur Tafsir."

significant role in the growth of the Islamic Society and established organizations as a forum for preaching. At the same time, Muhammad Basiuni Imran was more active in the Kingdom or Sultanate of Sambas. In 1319 AH (1901-1906), Muhammad Basiuni Imran was sent to Mecca to perform hajj, learn Arabic, and deepen his knowledge of Islam. While in Mecca, he knew the science of *nahwu*, *sharaf*, and Islamic law from Tuan Guru Umar Sumbawa and Tuan Guru Usman Serawak. He also studied with a scholar from Minangkabau, Sheikh Ahmad Khatib Al-Minangkabau, and specifically only studied Islamic law.[6] In 1910, Muhammad Basiuni Imran, with Ahmad Fauzi Imran and Ahmad Su'ud, traveled to Egypt, met Rashid Ridha, and received praise for his mastery of Arabic grammar.[7]

Among the various works authored by Shaykh Muhammad Basiuni Imran on science and religion, one notable piece is *Ḥusn al-Jawāb 'an Itsbāt al-Ahillah bi al-Ḥisāb*. Completed on Ramadan 6, 1352 AH (December 23, 1933), this book features a foreword by Muhammad Thaher Jalaluddin and was originally written in Malay. It was first published by *Maktabah az-Zainiyyah*, Penang, 1938. The book primarily discusses the determination of the beginning of lunar months, especially Ramadan and Shawwal, utilizing astronomical calculations (*ḥisāb*) to ascertain the start of the month and religious holidays. In the introduction, the author explains that the book was written to address differing views on determining the beginning of Ramadan and Shawwal—some relying on the *ḥisāb* calendar, while others on *rukyat* (moon sighting).[8]

The determination of the beginning of the Islamic calendar is a fascinating subject of study, as the evolution and development of scholarly thought contribute to shaping a new civilization within the realm of Islamic scientific knowledge, particularly in astronomy. This progress is reflected in the emergence of renowned astronomers in the archipelago whose significant ideas and works have established a clear and concrete scientific direction. Among the various branches of Islamic astronomy, determining the start of the Hijri month remains a particularly contentious issue, more so than topics like qibla direction or prayer time calculations. It is a long-standing debate that continues to be relevant for scholarly discourse.[9]

The commencement of a Hijri month is traditionally marked by the sighting of the *hilāl*—the new crescent moon—which signals the beginning of a new lunar month, as referenced in the Qur'an (Surah Al-Baqarah, 2:189). Historically, this observation-based method has been central to the Islamic lunar calendar. In contemporary practice, however, the beginning of the lunar month can also be determined through precise astronomical calculations. The lunar year, consisting of 12 lunar cycles, takes approximately 354 days and 11/30 of a day to complete. This is in contrast to the solar year—the time required for the Earth to complete one orbit around the Sun—which averages about 365¼ days.[10]

Among Muslims, there are different opinions about determining the beginning of the month of Islamic calendar. Some Muslims think that the only way to determine the beginning of the month

[6] GF Pijper, Tujimah, and Yessy Augusdin, *Beberapa Studi Tentang Sejarah Islam Di Indonesia 1900-1950*, 2nd ed. (Jakarta: UI Press, 1985).

[7] Pijper, Tujimah, and Augusdin.

[8] Pijper, Tujimah, and Augusdin.

[9] Ahmad Izzuddin, "Hisab Rukyah Islam Kejawen: Studi Atas Metode Hisab Rukyah Sistem Aboge)," *Jurnal Al-Manahij* IX, no. 1 (2015): 123–39, https://doi.org/https://doi.org/10.24090/mnh.v9i1.516.

[10] Arwin Juli Rakhmadi Butar-Butar, *Problematika Penentuan Awal Bulan: Diskursus Antara Hisab Dan Rukyat* (Malang: Madani, 2014).

is based on rukyat, which is understood based on the hadiths of the Prophet and the practices used by the Prophet in determining the beginning of the month. Meanwhile, some argue that the method that can be used to determine the beginning of the month is not only based on rukyat but also *ḥisāb*. This opinion is taken from the messages equated in the Qur'an about the date, time, and circulation of celestial bodies.[11]

With the advancement of science, contemporary scholars and observers have reexamined the Prophet Muhammad's hadiths concerning the methods of *ḥisāb* (astronomical calculation) and *rukyat* (moon sighting). Islam, in principle, does not oppose scientific progress. Historically, Muslim astronomers have significantly contributed to the determination of religious observances, including prayer times, the qibla direction, and celestial events such as eclipses. In modern discourse, there is a diversity of opinion among scholars regarding the use of *ḥisāb* in determining the beginning of the Hijri month. Some support its integration due to its precision, while others remain cautious, emphasizing traditional observational practices.[12] Undeniably, the development of science and technology leads to consequences for its use. Islam does not burden its people to do calculations with complicated astronomical formulas. This fact indicates that Islam does not prohibit the activity of ḥisāb, the calculation of the motion of the moon and the Sun.[13]

From the above review, the idea of the problem between *ḥisāb* and *rukyat* in general explains that the problems of *ḥisāb* and *rukyat* are basically two different groups. Although the differences are difficult to put together, the two are still very closely related. This means that this difference should not lead to the division of the *ukhuwwah islāmiyyah*. Paying attention to this phenomenon, the Ministry of Religious Affairs took the initiative to bring these differences together. This issue inspires the Indonesian Ministry of Religious Affairs to form *Badan Hisab Rukyat*.

B. Method

This research is a form of library research, a qualitative method that involves collecting and analyzing data from literature, documents, and scholarly sources. The study primarily uses textual analysis and unstructured interviews with key informants. The main source is *Ḥusn al-Jawāb 'an Itsbāt al-Ahillah bi al-Ḥisāb*, a key work by Muhammad Basiuni Imran, which forms the foundation of Islamic astronomical thought in Sambas. Additional data were gathered through interviews with Mr. Badran, his son, who offered insights into his father's views on lunar month determination and shared important manuscripts. Another interview was conducted with Mr. Anhari, the son of Murtaba Muhammad Chan, a student of Basiuni Imran, highlighting the transmission of astronomical knowledge across generations. To enrich the study, references to scientific journals, academic articles, and relevant media were also used. The research aims to explore the structure and development of *ḥisāb* methods within the local Islamic tradition of Sambas.

[11] Muhammad Hadi Bashori, *Pengantar Ilmu Falak* (Jakarta: Pustaka Al-Kautsar, 2015).
[12] Butar-Butar, *Problematika Penentuan Awal Bulan: Diskursus Antara Hisab Dan Rukyat*.
[13] Arwin Juli Rakhmadi Butar-Butar, *Penentuan Awal Bulan Di Mesir Dan Arab Saudi* (Surabaya: Media Sahabat Cendekia, 2019).

C. Result and Discussion

1. Intellectual Biography of Muhammad Basiuni Imran

Muhammad Basiuni Imran was born in Kampung Dagang, Sambas—approximately two kilometers from the center of the Sultanate—on Zulhijjah 25, 1302 AH (October 16, 1885). However, some sources indicate an alternative birth date of November 14, 1883. He was married to two wives during his lifetime: Muzinah binti Imam H. Hamid and Marhana. From his first marriage to Muzinah, he had six children: Wahhajah, Hasibah, Sabihah, Hanunah, Noma, and Muhammad Rasyid. His second marriage to Marhana resulted in ten children: Muanah, Makinah, Sahal, Badran, Dawyah, Nazimi, Taqiyuddin, Riyat, Jamaludin, and Mustafa Imam.[14] He is straightforward and familiar with anyone, including adherents of other religions. This indicates that Muhammad Basiuni Imran is a tolerant, accommodating figure who does not discriminate between associations based on religion, and that is the reality of the pluralistic Sambas society.

Muhammad Basiuni Imran began his education at the age of six or seven through both formal and informal means. He attended the People's School (*Volksschule*) for general education, while his religious training was conducted by his father, Muhammad Imran, the Emperor Imam of the Sultanate. Under his father's guidance, he studied the Qur'an and basic Islamic sciences, particularly Arabic grammar (*naḥwu*) and morphology (*ṣarf*), using classical texts such as *Al-Jurumiyah* and *Kaylani*. In 1319 AH (1901–1906), he was sent to Mecca to perform the Hajj, study Arabic, and further his Islamic knowledge. There, he studied grammar, jurisprudence, and logic with notable scholars such as Tuan Guru Umar Sumbawa, Tuan Guru Usman Serawak, and 'Ali Maliki. He also studied Islamic law under Ahmad Khatib Al-Minangkabawi. In 1342 AH (1906), he returned to Sambas at his father's request. During his time in Sambas, he subscribed to Al-Manar, a prominent reformist magazine led by Rashid Rida, a disciple of Muhammad Abduh. Inspired by its content, Basiuni Imran sought deeper learning and, in Zulkaida 1328 AH (Nov–Dec 1910), traveled to Egypt with his brothers to continue his studies.[15]

In Sha'ban 1331 AH (1913), Muhammad Basiuni Imran and his brother departed from Egypt after receiving news of their father's critical illness. They returned to Sambas, where their father, Muhammad Imran, passed away on August 25, 1913. He was laid to rest in their hometown. Following his father's death, Muhammad Basiuni Imran was officially appointed as the Maharaja Imam of the Sultanate on November 9, 1913, coinciding with the Eid al-Adha prayer. This appointment was formalized through an official decree issued by His Majesty Sultan Muhammad Syafiuddin. The installation ceremony was held at the Sambas Palace, marking the beginning of Basiuni Imran's leadership as a religious authority, succeeding his late father's position within the Sultanate's religious institution.[16]

[14] Nasrullah Nasrullah et al., "Pembaruan Pemikiran Pendidikan Islam Muhammad Basiuni Imran (1906-1976 M)," *Jurnal Diskursus Islam* 6, no. 1 (April 24, 2018): 135–55, https://doi.org/10.24252/jdi.v6i1.7056.

[15] Pijper, Tujimah, and Augusdin, *Beberapa Studi Tentang Sejarah Islam Di Indonesia 1900-1950*.

[16] Syamsul Kurniawan and Erwin Mahrus, *Jejak Pemikiran Tokoh Pendidikan Islam* (Yogyakarta: Ar-Ruza Media, 2013).

2. Exploring the Conceptual Framework of *Ḥusn al-Jawāb 'an Itsbāt al-Ahillah bi al-Ḥisāb*

One of the notable contributions of Muhammad Basiuni Imran in the field of Islamic astronomy is his work titled *Ḥusn al-Jawāb 'an Itsbāt al-Ahillah bi al-Ḥisāb*. The book, written in Arabic Malay (often referred to as Pegon script), is a concise yet significant treatise consisting of 28 pages and measures 18.2 by 13.4 centimeters. Originally printed in 1938 by Maktabah az-Zainiyyah in Penang, Malaysia, it was later republished by *Khazanah Fathaniyah* in Kuala Lumpur as part of the private collection of Haji Wan Mohd Shagir bin Abdullah. In this work, Basiuni Imran explores the use of astronomical calculations (*ḥisāb*) in determining the beginning of lunar months, especially in relation to Islamic rituals such as fasting during Ramadan. The book is prefaced by his close friend and fellow scholar, Muhammad Taher Jalaluddin al-Minangkabawi, a renowned Islamic astronomy expert who had studied in both Mecca and Egypt. Jalaluddin expresses his admiration for the content, noting its comprehensiveness in addressing the relevant religious texts (naṣ) concerning the *hilāl* (crescent moon) and the legal basis for determining the start of Ramadan through calculations. He points out the practicality of this method, particularly for regions like the Malay Peninsula and the Indonesian archipelago, where cloud cover and fog frequently obscure moon sightings.[17]

In the introductory section of his book, Basiuni Imran articulates the motivation behind its composition. He notes the persistent disputes among the Muslim community regarding the start of Ramadan and Shawwal. These disagreements, according to him, often stem from differing approaches: some rely entirely on calculations without adequate knowledge of astronomical sciences, while others adhere strictly to visual moon sightings (*rukyat*), citing the prophetic tradition that mandates fasting upon seeing the new moon. Basiuni Imran laments that such discord undermines the unity of the Muslim ummah and reflects poorly in the eyes of adherents of other faiths. Nevertheless, he acknowledges that differences are part of human nature, often rooted in varying levels of understanding. Despite this, he emphasizes that Islamic teachings call for unity, particularly in matters of religion that require precision and collective agreement.

The text opens by defining key terms such as *hilāl* (crescent), *qamar* (moon), and *shahr* (month), providing a foundation for the discussion. Basiuni Imran then examines the historical and jurisprudential practice of completing a lunar month as thirty days when the moon is not sighted, emphasizing its relevance for Sha'ban and Ramadan, especially when weather hampers visibility. He also discusses the theological rationale behind using moon sightings to determine worship times, highlighting the traditional role of *rukyat* in regulating the Islamic calendar and religious observances. However, Basiuni Imran contends that astronomical calculations can complement this practice, especially when direct observation is impractical. Citing the Qur'an, Hadith, and classical jurisprudence, he argues that *ḥisāb* aligns with Islamic principles and can enhance accuracy without contradicting religious norms. He particularly draws on the Shafi'i school, but also incorporates perspectives from other Sunni madhhabs. His balanced approach bridges classical scholarship with modern scientific reasoning. Basiuni Imran's writing reflects the intellectual climate of early 20th-century Southeast Asia, especially West Kalimantan, where Islamic thought was actively evolving.

[17] Muhammad Basiuni Imran, *Ḥusn Al-Jawāb 'an Itsbāt Al-Ahillah Bi Al-Ḥisāb*, 2nd ed. (Kuala Lumpur: Khazanah Fathaniyah, 2022).

His use of Malay Arabic script made his works accessible, while his thoughtful integration of traditional and modern methods earned him wide respect.

3. Revisiting the Determination of the Lunar Month: A Critical Analysis of Muhammad Basiuni Imran's *Ḥusn al-Jawāb*

The thought of Shaykh Muhammad Basiuni Imran regarding the determination of the beginning of the lunar month, as outlined in his work *Ḥusn al-Jawāb 'an Itsbāt al-Ahillah bi al-Ḥisāb*, represents a critical response to the condition of the Muslim community during his time, which was embroiled in polemics over the proper method for establishing the start of the Hijri month. In the introduction to his book, he stated that the primary motivation behind writing the work was the emergence of sharp differences of opinion among the people—differences that had the potential to cause conflict and division. At that time, most of society relied exclusively on *rukyat* (naked-eye observation of the crescent moon) as the only legitimate way to determine the start of the Hijri month. Meanwhile, others had begun introducing the method of *ḥisāb* (astronomical calculation) based on almanac calendars, which was often seen as strange, unconventional, or even contradictory to Islamic law. In this context, Shaykh Basiuni raised a fundamental question: does Islamic law strictly mandate the use of rukyat alone, or does ḥisāb also have a valid basis and legitimacy to determine the beginning of the month?[18]

In response to the methodological issues surrounding the determination of the beginning of lunar months, Shaykh Muhammad Basiuni Imran, through his monumental work *Ḥusn al-Jawāb 'an Itsbāt al-Ahillah bi al-Ḥisāb*, affirms that the use of astronomical calculations (*ḥisāb*) in various religious practices—including the determination of the beginning of the lunar month—is religiously legitimate. In this book, he argues that *ḥisāb* is not merely a rational approach but a valid and acceptable method for determining the proper timing of religious observances, much like how it is used in deciding prayer times. Basiuni supports his position by citing authentic hadiths and scholarly opinions from the Shafi'i school and other Islamic scholars who accommodate the use of astronomy to calculate time for religious observance. In a dedicated section of the book discussing the practice of relying on *ḥisāb* for all acts of worship tied to specific times, he asserts that applying astronomical calculations is not a deviation from Islamic tradition. Rather, it is an intellectual endeavor aimed at achieving precision and certainty (*qat'ī*) in the performance of ritual worship.[19]

The discussion begins by presenting the opinion of Ibn Hajar Al-Asqolani from his work *Fatḥ al-Bāri*, citing a hadith from the Prophet Muhammad. This hadith, which states that Muslims are a community that does not write or calculate, suggests that the months are sometimes twenty-nine and sometimes thirty days. Ibn Hajar interprets this not as a prohibition against using astronomical calculations (*ḥisāb*), but as a reflection of the socio-historical context during the Prophet's time, when most people were unlettered and unfamiliar with calculations or astronomy. Consequently, determining the start of the lunar month relied on *rukyat* (moon sighting), which was more practical for the community.[20]

According to al-Asqolani, this hadith cannot be taken as an absolute prohibition against the use of *ḥisāb* (astronomical calculation), but rather as a contextual explanation reflecting the

[18] Imran.
[19] Imran.
[20] Ibn Hajar Al-'Asqalani, *Fath Al-Bāri Ala Sharh Al-Bukhārī* (Beirut: Dar al-Fikr, 1995).

historical situation during the time of the Prophet Muhammad, when the majority of the Muslim community could not read, write, and perform calculations—let alone master Islamic astronomy. As such, the determination of the beginning of the lunar month at that time was based on rukyatul hilāl (moon sighting), as it was the most accessible method for the general public. Basiuni Imran argues that the restriction on *ḥisāb* in the Prophet's era was circumstantial rather than absolute. In modern contexts, where astronomical knowledge is advanced and reliable, there is no reason to dismiss *ḥisāb*, especially when it provides certainty (*yaqīn*) supported by scientific accuracy and religious validity.[21]

Basiuni Imran argues that the restriction on *ḥisāb* in the Prophet's era was circumstantial rather than absolute. In modern contexts, where astronomical knowledge is advanced and reliable, there is no reason to dismiss *ḥisāb*, especially when it provides certainty (*yaqīn*) supported by scientific accuracy and religious validity. He emphasizes that the term *ummi* (unlettered) in the hadith does not signify a ban on learning or calculation but highlights the transition from ignorance to knowledge. As the Qur'an itself encourages the use of intellect and science, Basiuni contends that embracing astronomical calculations aligns with Islamic teachings. He distinguishes between *ḥisāb manāzil* (scientific calculations based on celestial movements) and *'ilm al-nujūm* (astrology), stressing that the former is valid and reliable.[22]

Basiuni supports his stance with Qur'anic verses (Ar-Rahman: 5 and Yunus: 5) that indicate the precise movement of the Sun and Moon, reinforcing the legitimacy of scientific calculation. He further notes that scholars from the past held varying views on using *ḥisāb*, but the reliability of modern astronomical data justifies its use, especially when visual sighting is hindered. Basiuni also reflects on the practical application of ḥisāb, especially in regions like West Kalimantan (Sambas, Mempawah, Pontianak), where weather conditions often obstruct moon sightings. [23] In such contexts, the application of *ḥisāb* is deemed more appropriate and practical. He refers to the works of Sheikh Taher Jalaluddin, who published a calendar (*Natija al-Umr*) based on astronomical calculations, advocating its use for determining Islamic dates and prayer times.[24]

He highlights that the acceptance of *ḥisāb* should not create divisions within the Muslim community. Instead, religious authorities should guide its implementation to maintain unity, as demonstrated by the consensus reached during a seminar in 1992 in Bogor, Indonesia. Concluding his discussion, Basiuni reiterates that modern ḥisāb, rooted in scientific certainty, serves as a complementary approach to traditional *rukyat*, especially in contemporary contexts where precise calculations are essential.[25]

Muhammad Basiuni Imran argues that using *ḥisāb* (astronomical calculation) to determine the beginning of the lunar month, particularly Ramadan and other Islamic months, is no longer essential, especially in areas like West Borneo, including Sambas, Mempawah, and Pontianak. He emphasizes that, despite weather conditions such as rain, the application of *ḥisāb* remains relevant. Utilizing *ḥisāb* in religious practices still offers accurate and definitive knowledge, comparable to how modern prayer times are determined without directly observing the Sun. In contemporary

[21] Imran, *Ḥusn Al-Jawāb 'an Itsbāt Al-Ahillah Bi Al-Ḥisāb*.
[22] Imran.
[23] Imran.
[24] Imran.
[25] Bashori, *Pengantar Ilmu Falak*.

contexts, *ḥisāb* can accurately calculate the crescent moon's position, including the specific hours and minutes, whether visible or not. Regarding the criteria for determining the crescent moon (*hilāl*), Muhammadiyah employs three conditions that must be fulfilled simultaneously. First, there must be an *ijtimā'* (conjunction) of the moon and Sun. Second, the Sun must set before the moon. Third, the crescent moon must be above the horizon (*wujūd*), regardless of its altitude.[26] Oman Faturrahman explains that this system defines a crescent moon boundary line, where the Sun and moon set concurrently. When these locations are linked, they form the crescent moon boundary line, which signifies the transition into the new lunar month.

4. Bridging Tradition and Modernity: Shaykh Basiuni Imran's Advocacy for *Ḥisāb*

Muhammad Basiuni Imran's thought, as elaborated in his work *Ḥusn al-Jawāb 'an Itsbāt al-Ahillah bi al-Ḥisāb*, represents a significant response to the socio-religious challenges of his time. Faced with the polemics surrounding the determination of the Hijri month, particularly the dichotomy between *rukyat* (naked-eye observation) and *ḥisāb* (astronomical calculation), Basiuni advocated accepting *ḥisāb* as a valid Islamic method. This stance was rooted in his critique of the exclusive reliance on *rukyat* and his argument that *ḥisāb*, grounded in rational certainty (*qat'ī*), aligns with the principles of Islamic jurisprudence.

Basiuni's thought significantly influenced the evolution of Islamic astronomy in Indonesia. His advocacy for *ḥisāb* parallels the transformation witnessed in Muhammadiyah's calendrical methodology.[27] While the *wujūd hilāl* criterion is more straightforward, the KHGT method,[28] which accounts for celestial positioning and visibility, better reflects the astronomical advancements that Basiuni championed. Moreover, accepting *ḥisāb* in mainstream Islamic discourse has led to establishing institutions that integrate traditional Islamic scholarship with modern astronomical knowledge.[29] The development of standardized prayer time schedules and the acceptance of calculated lunar months in religious observances can be traced back to thinkers like Basiuni, who bridged the gap between classical jurisprudence and modern science.[30]

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[26] Tim Majelis Tarjih dan Tajdidi PP Muhammadiyah, *Pedoman Hisab Muhammadiyah*, II (Yogyakarta: Majelis Tarjih dan Tajdid PP Muhammadiyah, 2009).

[27] Oman Fathurohman, "Hisab Hakiki Dan Wujudul Hilal," in *Argumentasi Hisab Muhammadiyah*, ed. Wibowo Rahmadi (Yogyakarta: MTT PP Muhammadiyah, 2014); Rupi'i Amri, "Dinamika Penentuan Awal Bulan Kamariyah Menurut Muhammadiyah (Studi Atas Kriteria Wujud Al-Hilal Dan Konsep Mathla')," *At-Taqaddum* 4, no. 1 (2012): 129–48; Rohmat, "Penentuan Awal Bulan Qamariah Menurut Muhammadiyah," *Ijtimaiyya* 7, no. 1 (2014): 128–45; Marwadi Marwadi, "Renewing the Thoughts of the Hijri Calendar of Muhammadiyah, Nahdlatul Ulama and Persatuan Islam and Its Implications for Realization of National Hijri Calendar," *Al-Manahij: Jurnal Kajian Hukum Islam* 15, no. 1 (June 14, 2021): 19–36, https://doi.org/10.24090/mnh.v15i1.4870; Rahmadi Wibowo Suwarno, "Kalender Hijriah Global Tunggal (KHGT) Dalam Muktamar Muhammadiyah Ke-47, Muktamar Muhammadiyah Ke-48 Dan Muktamar Turki 2016," in *Seminar Dan Sosialisasi Kalender Hijriah Global Tunggal (KHGT)* (Medan: Universitas Muhammadiyah Sumatera Utara, 2023); Mohd Syaiful Anwar and Nawawi Mohd, "Relevansi Penggunaan Kriteria Imkanurrukyah Dalam Penentuan Awal Bulan Ramadhan Dan Syawal Di Malaysia," *Jurnal Falak* 1, no. 1 (2015): 99–117.

[28] Nursodik, "Kajian Kriteria Hisab Global Turki Dan Usulan Kriteria Baru MABIMS Dengan Menggunakan Algoritma Jean Meeus," *Al-Ahkam* 29, no. 1 (2018): 119–40.

[29] Susiknan Azhari, *Kalender Islam Ke Arah Integrasi Muhammadiyah-NU* (Yogyakarta: Museum Astronomi Islam, 2012).

[30] Tono Saksono, *Mengkompromikan Rukyat Dan Hisab* (Bekasi: Amythas Publicita, 2007); Syamsul Anwar, "Peralihan Kepada Hisab Adalah Pilihan Yang Tidak Mungkin Ditawar Lagi Dan Sah Adanya," in *Argumentasi Hisab Muhammadiyah*, ed. Rahmadi Wibowo (Yogyakarta: MTT PP Muhammadiyah, 2014); Khafid, "Hisab Dan Rukyat Kontemporer, Peran Kemajuan Teknologi Sebagai Solusi Sekaligus Pemicu Permasalahan

Muhammad Basiuni Imran's thoughts on determining the lunar month marked a pivotal moment in the development of Islamic astronomy in Indonesia. By advocating for integrating *ḥisāb* within Islamic jurisprudence, he addressed the sociocultural challenges of his era while setting the stage for the future acceptance of scientific approaches in religious practice.[31] Comparing his views with contemporary research reveals that his rational and context-sensitive approach continues to influence the discourse on the reconciliation of tradition and modernity within Islamic scholarship. As Indonesian Islamic astronomy progresses, Basiuni's contributions remain a critical reference point for integrating science and faith in a way that respects both traditional values and modern advancements.

D. Conclusion

Muhammad Basiuni Imran, in his book *Ḥusn al-Jawāb 'an Itsbāt al-Ahillah bi al-Ḥisāb*, addresses the determination of the beginning of the Islamic lunar month by integrating both traditional methods (*rukyat*) and modern astronomical calculations (*ḥisāb*). He emphasizes that while the hadith of the Prophet traditionally supports *rukyat* (moon sighting) for determining the start of the month, the advancement of astronomical knowledge (*ḥisāb*) offers significant benefits in establishing worship times, including prayer, eclipses, and the onset of the lunar month. According to Basiuni, the use of *ḥisāb* becomes especially relevant when weather conditions, such as rain or cloudy skies, obstruct the visual sighting of the crescent moon (hilāl). In such cases, employing *ḥisāb* is preferable over simply completing the month to 30 days. However, the book does not specify whether the method used is *'urfi* or *ḥisāb ḥaqiqi*, as it mainly discusses the application of astronomical calculations for fasting and holiday observance. For the month of Dzulhijjah, however, he follows the Umm al-Qura calendar of Mecca. His inclination towards using *ḥisāb* in determining the lunar month was significantly influenced by his mentors, including Ahmad Khatib Al-Minangkabawi during his studies in Mecca (1901–1906) and Shaykh Rashid Ridha of Egypt, a prominent reformist scholar of the early 20th century.

Baru," in *Seminar Hisab Dan Rukyat Kontemporer Di IAIN Walisongo* (Semarang, 2009); Nur Aida Athirah Sulaiman and Shahir Akram Hassan, "The Application of Rukyah and Hisab in Determining the Starting Dates of the Months of Ramadhan and Syawal in Thailand," *International Journal of Academic Research in Business and Social Sciences* 8, no. 4 (May 9, 2018), https://doi.org/10.6007/IJARBSS/v8-i4/4060.

[31] Ahmad Adib Rofiuddin and Ahmad Luqman Hakim, "NGOs Contestation On Islamic Hijri Calendar In Urban Muslim Society In Indonesia: From Authority To Identity," *Akademika : Jurnal Pemikiran Islam* 27, no. 2 (November 25, 2022): 171, https://doi.org/10.32332/akademika.v27i2.5357; Hasna Tuddar Putri, "Hisab Urfi Syekh Abbas Kutakarang: Kajian Etnoastronomi Dalam Penentuan Awal Bulan Hijriah," *Media Syari'ah* 21, no. 1 (February 28, 2020): 52, https://doi.org/10.22373/jms.v21i1.6476; Nur Aris, "Dinamika Kriteria Penentuan Awal Bulan Qamariah Dalam Penanggalan Umm Al-Qura' Saudi Arabia," *Al-Ahkam: Jurnal Ilmu Syari'ah Dan Hukum* 1, no. 1 (June 30, 2016), https://doi.org/10.22515/al-ahkam.v1i1.97; Muhamad Zainal Mawahib, "Implikasi Penggunaan Sistem Perhitungan Aboge Dalam Penetapan Awal Bulan Hijriah," *Syaksia : Jurnal Hukum Perdata Islam* 23, no. 2 (May 2, 2022): 182–210, https://doi.org/10.37035/syaksia.v23i2.7052.

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