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Syamsul Anwar's Vision: Establishing a Unified Global Islamic Calendar

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Abstract: *This article examines Syamsul Anwar's endeavours to promote the unification of the global Hijri calendar, which is essential for aligning Islamic religious observances, including Ramadan, Eid al-Fitr, and Eid al-Adha. Discrepancies in establishing the commencement of the Hijri month, especially in Indonesia, arise from the contrasting methodologies employed by Nahdatul Ulama, which relies on rukyat (moon sighting), and Muhammadiyah, which utilizes hisab (astronomical calculations). Syamsul Anwar's methods aims to amalgamate these techniques via five fundamental principles: acknowledgement of hisab, transference of imkanu rukyat, the cohesion of matlak, worldwide synchronization of days and dates, and acknowledgement of the International Date Line. The study employs qualitative methodologies, such as observation, interviews, and document analysis, to comprehend Anwar's perspectives. Notwithstanding extensive backing from Islamic astronomy professors, obstacles persist in Indonesia owing to the cultural importance of rukyat. This study suggests that additional research and discourse are necessary to reconcile these disparities and establish a worldwide unified Hijri calendar, thereby minimizing inconsistencies in religious rituals throughout the Muslim world*.
Keywords: *Global Hijriah Calendar, Syamsul Anwar, Unified.*

Abstrak: *Artikel ini mengkaji upaya Syamsul Anwar untuk menggalakkan penyatuan kalender Hijriah global, yang penting untuk menyelaraskan perayaan keagamaan Islam, termasuk Ramadan, Idul Fitri, dan Idul Adha. Perbedaan dalam menetapkan awal bulan Hijriah, khususnya di Indonesia, muncul dari metodologi yang kontras yang digunakan oleh Nahdatul Ulama, yang mengandalkan rukyat (penglihatan bulan), dan Muhammadiyah, yang menggunakan hisab (perhitungan astronomi). Metodologi Syamsul Anwar bertujuan untuk menggabungkan teknik-teknik ini melalui lima prinsip dasar: pengakuan hisab, pemindahan imkanu rukyat, kohesi matlak, sinkronisasi hari dan tanggal di seluruh dunia, dan pengakuan Garis Tanggal Internasional. Penelitian ini menggunakan metodologi kualitatif, seperti observasi, wawancara, dan analisis dokumen, untuk memahami perspektif Anwar. Meskipun mendapat dukungan luas dari para profesor astronomi Islam, kendala tetap ada di Indonesia karena pentingnya rukyat secara budaya. Studi ini menunjukkan bahwa penelitian dan wacana tambahan diperlukan untuk mendamaikan perbedaan ini dan menetapkan kalender Hijriah terpadu di seluruh dunia, sehingga meminimalkan ketidakkonsistenan dalam ritual keagamaan di seluruh dunia Muslim*.
Kata Kunci: *Kalender Hijriah Global, Syamsul Anwar, Unifikatif.*

A. Introduction

Individuals often require a calendar as a regulator, reminder, and temporal constraint. The Hijri Calendar is particularly significant for Muslims in determining the timing of yearly religious observances, including Eid al-Fitr prayers, Eid al-Adha, and Ramadan fasting. Muslims globally will engage in worship concurrently during specific months. Numerous divergent opinions on the commencement of the Hijri month have arisen globally, leading to intense arguments among Muslims and creating splits in worship rituals, as seen by the onset of Shawwal in 2019. The effort to standardize the Hijri Calendar commenced in 1939, approximately in 1940. Eight decades ago, the renowned Egyptian *hadith* scholar, Aḥmad Muḥammad Syākir, articulated his perspective in a work titled *Awā'il ash-Syuhūr al-*

'Arabiyyah, saying that "The commencement of the lunar month worldwide must align on the same day, an irrefutable truth."[1]

In Indonesia, discrepancies in the determination of the Hijri Calendar are prevalent, mainly due to differing interpretations of the commencement of the Hijri month by various Islamic mass groups, notably the influential Nahdatul Ulama (NU) and Muhammadiyah. The primary distinction resides in interpreting hisab rukyat, with Nahdatul Ulama' exemplifying the *ru'yah* school of thinking and Muhammadiyah representing the *hisab* school of thought.[2] The discrepancy in establishing the commencement of Ramadan in Indonesia, shown in 2023 when Muhammadiyah ascertained the start of Ramadan before the Government, which adhered to *rukyat*, underscores the necessity for the union of the *hisab* and *rukyat* methodologies in the Hijri calendar.[3]

Some argue that the beginning of the Hijri month must be based on the ru'yah (seeing) of the crescent moon on the 29th. Meanwhile, others say that the ru'yah in the hadith can be developed and interpreted as "knowing." However, this is only a strong assumption (*dzanni*), even though the crescent moon is invisible. And this second opinion is the most widely used by the *hisab* school.

This controversy is not exclusive to Indonesia; it is a global challenge every Muslim nation faces. Islamic astronomers are endeavoring to standardize the Hijri Calendar for universal recognition among Muslims. The concept of standardizing the Hijri Calendar by Islamic astronomers globally has evolved, culminating in the International Seminar on Unifying the Hijri Calendar, which occurred from May 28-30, 2016, AD (21-23 *Sha'ban* 1437 H) in Istanbul, Turkey.[4]

The primary aim of the meeting was to consolidate diverse viewpoints to create a cohesive worldwide Hijri Calendar. This calendar would operate on the principle that one day corresponds to one date universally across the globe. Despite the unforeseen outcome, the absence of agreement among Calendar experts hindered the establishment of a unified international Hijri Calendar by a vote. The Congress voted to establish a consistent worldwide Hijri Calendar to represent the ambitions of the Muslim community for Islamic civilization, which is hindered by its absence. This vote represented the majority opinion of the participants and illustrated the Muslim community's aspirations. Syamsul Anwar has been vigorously advocating for a worldwide Hijri Calendar in recent years through his scholarly publications and seminars conducted by the Center for Tajdid and Tarjih Muhammadiyah Yogyakarta. He has actively supported the establishment of a universal Hijri Calendar in Indonesia. This

[1]A. Jusran Kasim et al., "Determination of Hijri Calendar in Islamic History and Its Criteria in Southeast Asia", *Journal of Al-Tamaddun*, vol. 19, no. 1 (Academy of Islamic Studies, Dept of Islamic History and Civilization, University of Malaya, 2024).

[2]Rizal Ramadhan, Ahmad Izzuddin, and Mahsun, "Aboge Sebagai Siklus Awal Tahun Menyalahi Sunnatullah", *AL - AFAQ : Jurnal Ilmu Falak dan Astronomi*, vol. 5, no. 1 (2023).

[3]Abdullah A. Afifi and Afifi Fauzi Abbas, "Moderate Way Implementing Rukyah and Hisab to Determine A New Moon in Ramadan", *Journal on Islamic Studies, Civilisation and Learning Societies, Al-Imam*, vol. 3 (2022).

[4]Syamsul Anwar, "Tinjauan Maqasid Syariah Terhadap Kalender Islam Global", *Al-Marshad: Jurnal Astronomi Islam dan Ilmu-Ilmu Berkaitan*, vol. 5, no. 2 (2019).

ceremony marked the commencement of Syamsul Anwar's efforts to unify the Islamic Calendar and address the disparities that have divided Muslims globally, particularly in Indonesia, concerning worship customs. Syamsul Anwar partnered with Islamic astronomy specialists in Indonesia to achieve this objective.[5]

The author examines Syamsul Anwar's perspectives on the Global Islamic Calendar, particularly the evolution of its idea articulated by Anwar, which relies on the *hisab* approach (astronomical calculations) and the *usul fiqh* methodology. This notion is distinctive as it advocates for the unification of the worldwide Hijri calendar, a task previously challenging due to the divergent methods of *rukyat* (crescent moon observation) and *hisab* employed by numerous mass organizations in Indonesia, including NU and Muhammadiyah.

B. Methods

This study uses qualitative research methods to examine Syamsul Anwar's perspective on unifying the global Hijri Calendar. The data collection methods employed include observation, interviews, and documentation. Descriptive analysis is used to gather primary data, particularly materials related to Syamsul Anwar. Interviews are conducted to collect data through conversations between the interviewer and informants, while documentation is utilized to gain insights from the subject's viewpoint by examining written materials or documents produced by the subject. In this study, documentation includes the collection and analysis of various documents relevant to the research topic, such as academic writings, articles, scientific publications, research reports, and other documents related to the methodologies applied in the Hijri Calendar, especially those involving the differences between the rukyat and hisab methods.

Documentation allows the researcher to obtain secondary data that provides a broader context for the issues under investigation. These documents are used to enhance understanding of the theoretical background and related practices and to strengthen the analysis of data obtained from interviews and direct observations. This study aims to gather comprehensive primary and secondary data to support the arguments and conclusions presented in the paper.

The Miles and Huberman interactive model is used for data analysis, offering descriptive data regarding events or experiences pertinent to the research issue. This interactive model involves three main stages: data collection, data reduction, and data presentation. In the data collection phase, the researcher gathers data through interviews, observations, and documentation. The collected data is then analyzed to understand the phenomena being studied. Data reduction involves sorting and filtering out irrelevant or excessive data. Data that is relevant to the analysis is organized and unnecessary information is discarded to streamline the process. The final stage is data presentation, where the analyzed and reduced data is presented

[5]Ilham Ibrahim, "Prinsip-prinsip Kalender Islam Global Menurut Prof. Syamsul Anwar" dikutip dari https://pusattarjih.uad.ac.id/prinsip-prinsip-Kalender-Islam-global-menurut-prof- syamsul-anwar/ accessed on 06 october 2024.

in a format that is easily understandable and interpretable. This presentation can take the form of descriptive narratives, tables, or diagrams that highlight key findings from the study.[6]

This process is interactive, with all three stages occurring repeatedly and in conjunction with one another, allowing the researcher to develop a deeper understanding of the phenomena under investigation. By applying this model, the study not only obtains descriptive data but also connects various data points to provide a more holistic view of the unification of the Hijri Calendar.

The data analyzed includes primary sources obtained from interviews with Syamsul Anwar and direct observation of celestial events, such as the hilal (crescent moon). Primary data can also be derived from collecting field information regarding the implementation of rukyat and hisab procedures within Islamic communities in Indonesia, particularly by prominent organizations such as Nahdlatul Ulama (NU) and Muhammadiyah. This primary data enables the paper to present a more accurate and contextual perspective on the differing methods for determining the commencement of the Hijri month, which often leads to disputes.

Additionally, secondary data sources play a significant role in developing the theoretical framework for this article. Secondary data were sourced from literature surveys, historical documents, scientific publications, and prior research that examine the Islamic calendar and the methodologies of hisab and rukyat. These findings establish a solid scientific foundation and clarify the ongoing discussion regarding the determination of the Hijri month's commencement, which has been a long-standing debate among diverse Muslim communities worldwide.

Primary data provides direct field observations, while secondary data offers a broader historical and theoretical context. By integrating both data sources, this study offers a more comprehensive analysis, reinforcing the arguments and solutions proposed for achieving the global unification of the Islamic calendar.

C. Results and Discussion

1. Research Results

a. Variations in Determining the Commencement of the Hijri Month

There exist considerable differences between the hisab and rukyat methodologies used by Nahdlatul Ulama (NU) and Muhammadiyah in Indonesia, making the beginning of Ramadan, Shawwal, and Dzulhijjah contradictory. NU uses the rukyat (or visual moon sighting), but Muhammadiyah uses hisab (astronomical calculations). And often, they begin these critical months weeks — even months — apart. For this, Syamsul Anwar has fostered the unification of the Hijri calendar worldwide through academic writing and seminars, especially at the Muhammadiyah Centre of Sharifah and Tarjih in Yogyakarta. This initiative combines

[6]Abdul Mustaqim, "Model Penelitian Tokoh (Dalam Teori Dan Aplikasi)", *Jurnal Studi Ilmu-Ilmu al-Qur'an dan Hadis*, vol. 15 (2014).

traditional methods with modern scientific advancements to prevent the mess and bring them into harmony worldwide.[7]

1) Difference in Methods

The difference between the rukyat and hisab methods in determining the beginning of the Hijri month reflects two distinct approaches in Islamic tradition, as practiced by two major Islamic organizations in Indonesia, Nahdlatul Ulama (NU) and Muhammadiyah. The *rukyat* method (Direct Observation), adopted by NU, relies on the direct observation of the *hilal*, or the first thin crescent moon visible after sunset on the 29th day of the Hijri month. This method is rooted in prophetic traditions, where the Prophet Muhammad SAW instructed to begin fasting and break the fast based on the sighting of the moon. In practice, *rukyat* involves physically observing the moon with the naked eye or using telescopes at designated observation points.[8]

One of the key challenges with this method is that the ability to sight the *hilal* is highly dependent on geographical, weather, and atmospheric conditions. The *hilal* may not be visible in some areas, especially those with poor weather or high light pollution. Additionally, the spherical nature of the Earth causes differences in the moon's rise and set times across different regions. As a result, some parts of the world may be able to see the *hilal* while others cannot, depending on the moon's position relative to the sun and the observer's location.

A concrete example of this difference occurred on 27 June 2014, when the *hilal* was visible in Pago, America, with an elevation of 8°20'20", while in Yogyakarta, Indonesia, the moon's elevation was only 0.5°, making it nearly impossible to observe. Such visibility differences often result in discrepancies in determining the start of the month, leading to some Muslims beginning Ramadan on different days worldwide.[9]

In contrast, Muhammadiyah uses the *hisab* method (Astronomical Calculation), which is entirely based on mathematical and astronomical calculations to determine the moon's position without requiring direct visual confirmation. *Hisab* predicts the position of the *hilal* based on accurate data about the moon's and sun's orbits and establishes that the new month begins when the *hilal* is above the horizon, even if it cannot be physically seen due to natural factors such as clouds or atmospheric pollution.

The advantage of the hisab method lies in its consistency, as it is not reliant on weather conditions or the observer's ability to sight the *hilal*. Using this method, the Hijri calendar can be prepared well before the new month, offering greater certainty about when the new month will begin. This approach also accounts for the Earth's rotation and the moon's global positioning, making applying a unified calendar worldwide easier.

However, the *hisab* method is often criticized by *rukyat* proponents for not adhering to the literal instruction in the *hadith*, which states that fasting begins with the physical sighting

[7]Interview with Syamsul Anwar on February 23, 2021 at 08.00 WIB at Juwangen's residence, Jalan Kenanga I, Gang Mawar II rt 03 rw 01 no.43, Syamsul Anwar (2014), Diskusi dan Korespondensi Kalender Hijriah Global, (Yogyakarta: Suara Muhammadiyah).

[8]Syamsul Anwar, *Diskusi dan Korespondensi Kalender Hijriah Global*, 1st edition (Yogyakarta: Suara Muhammadiyah, 2014).

[9]Anwar, *Diskusi dan Korespondensi....*

of the *hilal*. Despite this, the *hisab* method is supported by strong astronomical evidence and is recognized by some scholars as a valid approach, particularly when *rukyat* is not feasible. The distinction between these two methods creates variations in determining the beginning of the Hijri month in Indonesia. It highlights a broader debate about how Islam should interpret tradition in light of modern scientific advancements.

2) Examples of Differences in Determining the Start of Ramadan 1435 H/2014 M

In 2014, a notable discrepancy in the commencement of Ramadan emerged between Muhammadiyah, which used the *hisab* technique, and the Indonesian Government, in conjunction with Nahdlatul Ulama (NU), which utilizes the *rukyat* method. Muhammadiyah's astronomical calculations (*hisab*) indicated that Ramadan commenced on 28 June 2014. This conclusion was derived from the moon's placement, which, despite being invisible to the naked eye, was computed to be above the horizon post-sunset on 27 June 2014, signifying the existence of the *hilal* (new crescent moon).

In contrast, the Indonesian Government and NU, utilizing the *rukyat* technique, announced that Ramadan would commence on 29 June 2014 due to the absence of *hilal* sightings on 27 June throughout most of Indonesia. In regions like Yogyakarta, the moon's height was recorded at merely 0.5 degrees, rendering the observation of the *hilal* almost impossible. According to the *rukyat* technique, the new month cannot commence until the crescent moon is confirmed.[10]

This disagreement underscores a key distinction between the *hisab* and *rukyat* approaches. While *hisab* employs exact astronomical computations to forecast the moon's occurrence irrespective of its visibility, *rukyat* necessitates visual verification. Consequently, Muslims across Indonesia commenced Ramadan on varying dates in 2014. Adherents of Muhammadiyah commenced fasting on 28 June, but those aligned with the Government and NU's decision began on 29 June.

This case illustrates the difficulties in attaining consistency in the Islamic calendar owing to divergent interpretations of Islamic tradition. The dependence on direct observation in *rukyat* can be affected by geographical, meteorological, and climatic conditions, resulting in inconsistencies in the commencement of significant Islamic events. The *hisab* method provides a reliable and scientifically validated strategy; nonetheless, it encounters opposition from proponents of conventional *hadith-based* moon-seeing traditions. This disagreement illustrates a wider conflict within the Muslim community concerning integrating modern science into religious practices.

3) Social and Cultural Impact

The disparity between the *hisab* and *rukyat* procedures engenders confusion among Muslims, who may lack a comprehensive understanding of these approaches. This results in inconsistencies during religious observances such as *Tarawih* prayers and fasting during Ramadan. This discrepancy emerged in 2014, when Muhammadiyah, employing the *hisab*

[10]Moonsighting for Ramadan 1435." Moonsighting.com, 2014. https://www.moonsighting.com, accessed on 06 october 2024.

technique, proclaimed the commencement of Ramadan on 28 June, while the Indonesian Government and Nahdlatul Ulama (NU), adhering to the *rukyat* method, announced it a day later, on 29 June.

The discrepancy in the commencement date of Ramadan led to a misalignment of religious practices. For example, adherents of Muhammadiyah commenced their *Tarawih* prayers and fasting early, while those aligned with the Government and NU began a day later. The variance in the date of key Islamic ceremonies can engender confusion and disagreement within the Muslim community.[11]

This issue demonstrates that the variations in the understanding and application of Islamic tradition, especially at the commencement of the Hijri month, are not solely theological but are also shaped by socio-cultural influences. The inclination towards *rukyat*, necessitating direct observation of the *hilal*, is associated with a deep-rooted cultural affinity for ancient practices. In contrast, the *hisab* technique, grounded in scientific astronomical computations, signifies a contemporary interpretation of Islamic doctrine.[12]

The research indicates that entrenched social and cultural preferences within particular communities can obstruct the unification of the Islamic calendar, particularly in a varied nation such as Indonesia, where several Islamic mass organizations wield significant influence. Consequently, although *hisab* provides a scientifically dependable approach for ascertaining the Islamic calendar, its general acceptability is hindered by conventional practices, highlighting the overarching conflict between modernization and tradition in religious settings.

b. Astronomical and technical challenges

Numerous astronomical and technical obstacles in unifying the global Hijri calendar. The primary problem encountered pertains to the constraints of *rukyat* (crescent moon observation), which differ according to a geographical location on Earth. The author highlights that the Earth's surface is bifurcated into two sections during the initial sighting of the crescent moon: the western zone, which has a higher probability of observing the crescent, and the eastern region, which has a lower probability. The Earth's rotation influences the crescent moon's trajectory from east to west, making western regions more likely to observe the crescent moon before eastern areas.

This constraint results in discrepancies in establishing the commencement of the Hijri month, whereby the western region may initiate the new month a day before the eastern region. This article illustrates the disparity observed on 27 June 2014, when the crescent moon was visible in the Pago and Papeete regions of the Pacific Ocean on a Friday. In contrast, in Indonesia, the crescent moon was unobservable due to its low position, with some areas having the moon below the horizon. Muhammadiyah established that 1 Ramadhan 1435 H commenced

[11]Amirah Himayah, Shirly Ardini, and Tatmainul Qulub, "Penyatuan Kalender Hijriah Nasional dalam Perspektif Ormas Muhammadiyah dan Nahdatul Ulama (NU)", *AL – AFAQ: Jurnal Ilmu Falak dan Astronomi*, vol. 3, no. 2 (2021).

[12]Marwadi, Rina Heriyanti, and Farah Nuril Izza, "The Fiqh of Hisab-Ru'ya in the Twentieth Century Indonesia: Study on the Thoughts of Hamka, Hasbi Ash-Shiddieqy, and Moenawar Chalil about the Unification of Hijri Calendar", *Al-Manahij: Jurnal Kajian Hukum Islam*, vol. 17, no. 1 (2023).

on Saturday, 28 June 2014; however, mass organizations and the Government, employing the *rukyat* method, identified the onset of Ramadhan as Sunday, 29 June 2014.

The author observes that *rukyat* cannot be uniformly employed to synchronize the commencement of the Hijri month internationally, owing to varying climatic and geographical elements, including overcast conditions and disparate moon elevations across distinct locales. To address this difficulty, Syamsul Anwar advocated using *hisab* (astronomical calculations) as a more productive method, grounded in the principle that the crescent can be scientifically computed and complies with sharia. This method is deemed more suitable for unifying Muslims and establishing the commencement of the Hijri month globally.

c. Syamsul Anwar's Methodology

Syamsul Anwar's methodology for unifying the global Hijri calendar integrates the *hisab* (astronomical calculation) technique with Islamic legal principles (*ushul fiqh*) to ensure Muslims synchronize prayer times globally. This is a detailed analysis of Syamsul Anwar's methodology:[13]

1) Acceptance of Hisab

Syamsul Anwar asserts that the worldwide unified Hijri Calendar cannot be established via the *rukyat* technique, as its formulation necessitates a time plan extending far into the future. If the application of *rukyat fiqh* to develop a uniform Hijri Calendar is unfeasible, then the creation of a local Calendar utilizing the *rukyat* approach is also impracticable, as *rukyat* is confined to specific geographical places on the first day the crescent moon is observed.[14]

Syamsul Anwar asserts that the worldwide Islamic Calendar can only be established by the *hisab* technique, as this approach is employed to ascertain prayer hours. It is understood that *hisab* is not the primary technique used by the Prophet Muhammad *sallallahu'alaihi wasallam* to determine the commencement of the month. The Qur'an and al-Hadith prove the practice of *hisab*, establishing it as a technique acknowledged by the texts. Syamsul Anwar evaluated that the essence of employing *rukyat* in society pertains to the interpretation of the *hadith* of the Prophet *sallallahu 'alaihi wasallam*: "Fast upon sighting the crescent moon (*liru'yatih*) and break the fast upon sighting the crescent moon (*liru'yatih*)." Syamsul Anwar asserts that implementing literal and contextual readings remains contentious today. In the era of the Prophet *sallallahu 'alaihi wasallam*, the practice of rukyat faced no impediments since Muslims were confined to a limited region, specifically the Arabian Peninsula. The visibility of the crescent moon at that time did not influence other places, and Muslims remained confined to the Arabian Peninsula.

In contrast to the contemporary age, Muslims have disseminated to all regions of the globe. The introduction of *rukyat* at this juncture may hinder the unification of Muslims

[13]Interview with Syamsul Anwar on February 23, 2021 at 08.00 WIB at Juwangen's residence, Jalan Kenanga I, Gang Mawar II rt 03 rw 01 no.43. Lihat juga, Syamsul Anwar, *Studi Hukum Islam Kontemporer (Bagian Dua)*, 1st edition (UAD Press, 2020).

[14]Nurul Wasilah Wahidin, "Problematika Penyatuan Kalender Hijriyah", *Al-AFAQ: Jurnal Ilmu Falak dan Astronomi*, vol. 4, no. 2 (2022).

commencing the Hijri month owing to natural impediments. Consequently, we must transcend literal and literary interpretations that may obstruct the global unity of the Islamic Calendar.

2) Transfer Imkanu Rukyat

Syamsul Anwar stated that when one area has undergone *imkanu rukyat* while another has not, the moon may remain below the horizon in that location. This circumstance necessitates the principle of transferring imkanu *rukyat*. This indicates that the imkanu *rukyat* observed in one location gets conveyed to another place that has not experienced imkanu *rukyat*. The region where the *hilal* remains below the horizon is encompassed within the area that has first experienced imkanu *rukyat*. This is why this region likewise transitions into the new month. This cannot be accomplished otherwise because if the region with imkanu rukyat has not observed the *hilal* at that moment due to awaiting a region that has not yet achieved imkanu *rukyat*, it will contradict the directive of the Prophet *Ṣallallahu 'Alaihi wa Sallam,* "Fast when you see the hilal..." If one delay for a region lacking imkanu *rukyat*, it can be asserted that the region with imkanu *rukyat* violates the command. Consequently, as stated by Syamsul Anwar, the transfer of *rukyat* imkanu is only conducted from regions possessing rukyat imkanu to those without it.

3) Matlak Unity

From the concept of the transfer of imkanu *rukyat*, the principle of the oneness of the *matlak* arose as a consequence of the former. Syamsul Anwar asserts that this concept regards all areas within this hemisphere as a singular entity; if imkanu *rukyat* occurs in one place, it is deemed applicable to all territories within this hemisphere since the terrestrial regions constitute an absolute oneness. Upon adopting this third principle, those in the East must promptly rely on *rukyat* from the West.[15]

Syamsul Anwar stated that the physical location of a specific place has constrained this absoluteness. Fairy tales that incorporate the concept of Nationalism have fragmented the world, preventing a cohesive oneness. The myth of the state and country significantly constrains humans, making it challenging to acknowledge the world as one entity. Syamsul Anwar asserted that absolute *Ijtihad* is a significant advancement capable of promptly establishing a universal Islamic Calendar.

4) Day and Date Alignment

The global or unification Hijri calendar operates on the premise of a singular date universally, signifying that if it is the 1st in one location, it is concurrently the 1st everywhere else in the world. This differs from the present calendar, as the Islamic calendar encompasses many dates within a single day. For instance, Wednesday, 6 July 2016, is marked by two significant dates: the 1st of Shawwal and the 30th of Ramadan. Some will occur on Tuesday, the 1st of Shawwal, while others will occur on Wednesday and Thursday. Consequently, a single date in question

[15]Man, Hashim M.R and Mohd Nawawi M.S.A, "Maṭla' Anak Bulan Menurut Perspektif Fiqh (Maṭla' al-Hilal From Islamic Jurisprudence Perspective)", *Online Journal of Research in Islamic Studies*, vol. 11, no. 1 (2024). Lihat juga, Aris Tiono Hamdani, "Analisis Perspektif Empat Madzhab Terhadap Matla' dalam Penentuan Awal Bulan Hijriah", *AL - AFAQ : Jurnal Ilmu Falak dan Astronomi*, vol. 4, no. 1 (2022).

encompasses three distinct days. Syamsul Anwar asserts that a single day should be universally recognized as one day worldwide.[16]

5) Recognition of the International Date Line

The International Date Line is an artificial demarcation, not governed by astronomical phenomena or Earth's rotation. It is a conceptual framework that functions as a fundamental reference for a day and plays a crucial role in the worldwide synchronization of the Gregorian Calendar on the same day.

Syamsul Anwar stated that the International Date Line depicts two different days, with the day to the west of the line occurring before the day to the East. If the area to the west of the line is designated as the 2nd day, then the area to the East remains the 1st day of Thursday. Syamsul Anwar asserted that the location of the date line is universally accepted at 180 degrees East.

Syamsul Anwar asserted that the primary rationale for selecting this place as the International Date Line is the predominance of oceanic breadth since the line intersects just a few minor islands, including Tokelau, Samoa, Kiribati, and others. The presence of these islands renders the International Boundary Line irregular owing to commercial and political considerations. Syamsul Anwar determined that Muslims have unequivocally acknowledged the location of the International Boundary Line at 180 degrees East Longitude. This may be demonstrated by analyzing the execution of Friday prayers by calculating Friday from the line.

Syamsul Anwar's approach to the unification of the global Hijri calendar is supported by astronomical data that demonstrates the effectiveness of the *hisab* method in accurately predicting prayer times. For example, on 12 April 2021, an *ijtima* (conjunction) occurred at 09:33:59 WIB, showing the visibility of the crescent moon in the Yogyakarta region. This illustrates how the *hisab* method can avoid the uncertainty often associated with the *rukyat* method. His approach emphasizes the importance of aligning *hisab* and *rukyat* methods through applying scientific principles and Islamic law, aiming to unite Muslims globally in their religious observances. Although its implementation faces challenges, particularly from Islamic organizations prioritising the *rukyat* method, Syamsul Anwar's approach offers a comprehensive solution for effectively and consistently unifying the Hijri calendar. The calendar serves as a crucial regulator, reminder, and temporal constraint. The Hijri Calendar is particularly significant for Muslims in ascertaining the timing of yearly religious observances, such as Eid al-Fitr, Eid al-Adha, and Ramadan fasting. Muslims globally will engage in worship concurrently during specific months.

Nevertheless, several divergent opinions arose worldwide at the start of the Hijri month, leading to Muslim debates resulting in splits in their worship rituals. The source of these discrepancies is linked to three fundamental but pivotal factors: "comprehension of the crescent

[16]Marataon Ritonga et al., "Problematika Penentuan Hari Tarwiyah dan Arafah Serta Solusinya", *ASTROISLAMICA Journal of Islamic Astronomy*, vol. 2, no. 1 (2023).

moon, methodologies for ascertaining the crescent moon, and the Hijri Calendar." The three factors under consideration are oneness, inseparability, and collective-assertive *ijtihad.*[17]

2. Discussion

a. Reinterpretation of the Hadith Regarding Rukyat

Drawing from Syamsul Anwar's reinterpretation, we find that the *hadiths* explaining that rulers needed to observe when the moon was seen (rukyat) were required because, during the time of the Prophet Muhammad, the technological capacity was so limited, they could not rely on a picture of the moon to identify the crescent for them. With today's developments in astronomy, he states that Muslims can depend on using precise astronomical calculations (hisab) to calculate the commencement of the Hijri month instead of visual observation. Anwar introduces two critical methodologies: The causal analysis (*taklili*) of the Prophet's saying and the principle that the shari'ah is elastic regarding evanescent laws as long as they do not entail an obligation of worship. According to him, the rukyat is based on *ahad* traditions and is, therefore, a probabilistic law (*dzanni*) and can be displaced in the conditions of the present times in *favour* of hisab (specific law).

This discourse aims to reconcile Islamic traditions grounded in sacred texts with contemporary scientific progress, providing a pragmatic and scientifically informed approach to resolving discrepancies in the determination of the Hijri month's commencement, which frequently leads to discord among Muslims.

b. Comparison with another Calendar

1) Comparison with the *Bizonal* Calendar Concept

The *Bizonal* calendar concept is a proposed alternative to unify Muslims worldwide in establishing the commencement of the Hijri month. This methodology categorizes the world into two primary regions: the western and eastern zones. Every zone possesses a distinct reference point for observing the crescent moon (*hilal*) and initiating the new month.

Division of Zones: The *Bizonal* calendar concept delineates the Earth into two extensive zones, each with distinct timings for observing the crescent moon. The western zone is more prone to sighting the *hilal* first due to the Earth's rotation, but the eastern zone often has a diminished likelihood of observing the crescent moon on the same day.[18]

Discrepancies in Worship Timing: The article indicates that the *Bizonal* calendar creates complications with the consistency of worship hours. The western zone can commence the new month upon sighting the crescent moon. However, the eastern zone may need to wait an extra day if the *hilal* remains unobserved. Consequently, Muslims in the western region would commence fasting or observe Islamic holidays before those in the eastern region. This contradicts the "one day, one date" philosophy promoted by Syamsul Anwar.[19]

[17]Interview with Syamsul Anwar on February 23, 2021 at 08.00 WIB at Juwangen's residence, Jalan Kenanga I, Gang Mawar II rt 03 rw 01 no.43.

[18]Ahmad Adib Rofiuddin and Ahmad Izzuddin, "Optimist And Pessimist Moon-Sighting: The Study Of Islamic Calendar Determination In Indonesia", *Muàṣarah: Jurnal Kajian Islam Kontemporer*, vol. 4, no. 2 (IAIN Antasari, 2022).

[19]Anwar, "Tinjauan Maqasid Syariah Terhadap Kalender Islam Global".

Illustrative Case: Muslims in North America or the Middle East, situated in the western zone, may observe the crescent moon and commence Ramadan. However, Muslims in East Asia or Indonesia (eastern zone) might need to defer by another day. The absence of synchronization leads Muslims to commemorate Islamic anniversaries on varying days, resulting in notable discrepancies in the observance of critical Islamic occasions. Syamsul Anwar critiques the *Bizonal* calendar's inability to join Muslims globally in synchronous worship. This method addresses the issue by partitioning the world into two extensive time zones; nonetheless, it exacerbates fragmentation, as individuals in the eastern zone will consistently experience delays relative to those in the western zone. This is perceived as undermining the objective of attaining global consistency in worship schedules.

2) Comparison with the Mohammad Ilyas Calendar

Mohammad Ilyas is a Muslim astronomer who developed a methodology for the Hijri calendar. Ilyas' methodology involves categorizing the world into two groups according to the visibility of the crescent moon. Segmentation of Hilal and Regions: In Mohammad Ilyas' calendar framework, the world is bifurcated into two segments: one where the crescent moon is observable and another where it is not. This method seeks to tackle the problem of inconsistent crescent visibility globally. When the hilal is observed in one portion of the planet, that area may commence the new month, while other regions that have not viewed the hilal must defer until they can do so.

The Mohammad Ilyas model influences worship practices by segmenting based on the visibility of the crescent moon, resulting in Muslims throughout various regions performing worship at disparate times. Like the *Bizonal* calendar, this method leads to a loss of synchronization, causing Muslims in the Western hemisphere to commence the new month before those in the Eastern Hemisphere.[20]

The article critiques the Mohammad Ilyas model, asserting that segmenting the month is impracticable globally. The necessity for one location to await the visibility of the crescent moon will result in considerable discrepancies in the commencement of the Hijri month. Similar to the *Bizonal* notion, this methodology is regarded as inadequate in addressing the inconsistency in worship caused by regional variables influencing the visibility of the crescent moon.

Comparison with Syamsul Anwar's Perspective: Syamsul Anwar contends that the Mohammad Ilyas approach is inconsistent with the objective of universal unification. He advocates for Muslims to use a more scientific and astronomical calculation approach (*hisab*), enabling the determination of the Hijri month's commencement long ahead of the crescent moon's actual sighting. This will allow Muslims globally to commence the new month simultaneously, independent of the differing visibility of the *hilal* throughout various places.

Both the *Bizonal* Calendar Concept and Mohammad Ilyas' Calendar encounter difficulties in synchronizing worship times for Muslims globally, as both depend on the

[20]Muhamad Syazwan Faid et al., "Assessment and review of modern lunar crescent visibility criterion", *Icarus*, vol. 412 (Academic Press Inc., 2024).

restricted visibility of the crescent moon influenced by geographical and meteorological factors. These methodologies result in fragmentation of religious practices, as Muslims in the western region may commence the month earlier than those in the eastern region.

Syamsul Anwar advocates for an alternative approach utilizing the *hisab* method, which depends on astronomical calculations to ascertain the precise visibility of the crescent moon. This method is regarded as more pragmatic and appropriate for contemporary society, enabling Muslims worldwide to commence the new month concurrently without reliance on physical observations of the *hilal*.

3) Challenges of Implementing the Global Islamic Calendar

a) Astronomical and Technical Challenges

The article addresses the substantial astronomical and technical issues of establishing a universal Islamic calendar. These issues are intricately linked to the Earth's spherical shape and spin, resulting in different locations observing the crescent moon (*hilal*) at disparate periods. A primary problem in creating a worldwide Hijri calendar is the inconsistent timing of *hilal* sightings across various regions of the Earth. Due to the Earth's rotation from west to east, western regions are frequently more likely to observe the crescent moon before eastern areas. This results in discrepancies in identifying the commencement of the Hijri month among different countries or locations.[21]

On 24 September 2014, the crescent moon was observable in specific western locations but not others. This scenario underscores the challenges of universally implementing the *rukyat* approach, which relies on the direct observation of the *hilal*. Simultaneously, certain western places may have already sighted the *hilal* and commenced the new month. At the same time, eastern parts could require an additional day because of the obscured visibility of the crescent moon.

The constraints of the *rukyat* approach, dependent on eye observation, are exacerbated by geographical, meteorological, and atmospheric conditions. Cloud cover, precipitation, or fog can impede visibility, complicating the proper assessment of the crescent moon's appearance. This dependence on eye observation may result in ambiguity over the commencement of the Hijri month, especially in areas with adverse weather conditions. The problem is exacerbated by the crescent moon's visibility being restricted to specific regions of the Earth, rendering it unfeasible for the entire planet to commence the new month simultaneously based purely on visual observation. These discrepancies result in anomalies in religious observances, including the commencement of Ramadan and Islamic holidays.[22]

Rather than the direct sighting of the moon, which was necessary when astronomers had less information, the hisab method provides a practical, purely astronomical method of

[21]Siti Tatmainul Qulub and Ahmad Munif, "The Urgency and Contribution of Information Technology in Verifying the Beginning of Shubuh Time and the Height of Hilal Determining the Beginning of the Hijri Month", *Al-Marshad: Jurnal Astronomi Islam dan Ilmu-Ilmu Berkaitan*, vol. 9, no. 2 (Universitas Muhammadiyah Sumatera Utara, 2023).

[22]Muhamad Zakuwa Rodzali and Sa'adan Man, "Relevance of Uhadi Calendar with Conditions Determined by Istanbul Congress 2016 For Global Hijri Calendar", *Online Journal of Research in Islamic Studies*, vol. 8, no. 1 (Univ. of Malaya, 2021).

determining the start of the month of Hijri without recourse to direct sighting. Yet, the wide acceptance of the view is hampered by those who see rukyat (visual moon sighting) as being spiritually and traditionally significant. However, variations in moon visibility due to weather and geography make adopting a universal Islamic calendar even more challenging. Finding global consensus is overcoming all these challenges while balancing the rukyat tradition with modern scientific methods.

b) Religious Interpretation and Legal Reinterpretation

The interpretation of religious and legal writings focuses on the comprehension and application of Islamic scriptures, especially with the determination of the commencement of the Hijri month within a contemporary framework. Syamsul Anwar advocates for reinterpreting *hadiths* concerning *rukyat* (the observation of the crescent moon) by scientific progress, particularly in astronomy. The article elucidates that throughout the era of the Prophet Muhammad, the *rukyat* method was employed owing to the constraints of Knowledge and technology prevalent at that time. Muslims were directed to examine the crescent moon personally due to the unavailability of precise astronomical calculations.

Nevertheless, Anwar contends that scientific breakthroughs enable Muslims to ascertain the crescent moon's appearance by the *hisab* technique (astronomical computation), which is more accurate and independent of direct eye inspection. This necessitates a revision of the *hadiths* concerning *rukyat*. Anwar underscores the significance of *taklili* (causal analysis) in comprehending the reasoning behind the Prophet's instruction regarding *rukyat*. In this context, he proposes that the order was issued due to the populace's inability to perform precise calculations, thus allowing for the law of *rukyat* to be modified or supplanted by *hisab*.

The article examines Syamsul Anwar's advocacy for employing *ushul fiqh* (Islamic legal methodology) to modify the law in response to temporal, locational, and circumstantial changes. This idea recognizes that Islamic law may evolve, provided it does not relate to *mahdah* (purely ritual worship) and is grounded in explicit *sharia* principles. Anwar contends that the mandate for *rukyat* is not *qat'i* (definitive) but relies on *ahad* traditions, resulting in *Dzanni* (probabilistic) conclusions. Consequently, this legislation can be modified to align with contemporary situations where *hisab* may hold greater significance.

Religious and legal interpretations must exhibit flexibility, particularly in response to scientific advancements. The *hisab* method, bolstered by contemporary astronomical calculations, is regarded as a more pertinent and scientific means of establishing the commencement of the Hijri month, although encountering opposition from proponents of the *rukyat* method.

c) Socio-Cultural and Organizational Obstacles

The interpretation of religious and legal texts focuses on understanding and applying Islamic scriptures, especially with the determination of the commencement of the Hijri month within a contemporary framework. Syamsul Anwar proposes that the *hadiths* concerning *rukyat* (the crescent moon observance) ought to be rewritten by scientific progress, particularly in astronomy. The article elucidates that throughout the era of the Prophet Muhammad, the *rukyat* method was employed owing to the constraints of Knowledge and technology prevalent at that

time. Muslims were directed to examine the crescent moon directly due to the unavailability of precise astronomical calculations.[23]

Nonetheless, Anwar contends that scientific breakthroughs enable Muslims to ascertain the crescent moon's appearance by the *hisab* technique (astronomical computation), which is more accurate and independent of direct eye inspection. This necessitates a reevaluation of the *hadiths* concerning *rukyat*. Anwar underscores the significance of *taklili* (causal analysis) in comprehending the reasoning underlying the Prophet's instruction regarding *rukyat*. In this context, he proposes that the order was issued due to the populace's inability to perform precise calculations, thus allowing for the law of *rukyat* to be modified or supplanted by *hisab*.[24]

The paper examines Syamsul Anwar's endorsement of *ushul fiqh* (Islamic legal methodology) for the adaptation of law in response to temporal, locational, and contextual changes. This idea recognizes that Islamic law may evolve, provided it does not relate to *mahdah* (purely ritual worship) and is grounded in explicit *sharia* principles. Anwar contends that the mandate for *rukyat* is not *qat'i* (definitive) but relies on *ahad* traditions, resulting in *Dzanni* (probabilistic) conclusions. Consequently, this legislation can be modified to align with contemporary settings where *hisab* may be deemed more pertinent.

Religious and legal interpretations must exhibit flexibility, particularly in response to scientific advancements. The *hisab* method, bolstered by contemporary astronomical calculations, is regarded as a more pertinent and scientific means of establishing the commencement of the Hijri month, although encountering opposition from proponents of the *rukyat* method.

Implementing a global Islamic calendar presents complex technological, astronomical, theological, legal, and socio-cultural issues. The *hisab* technique provides a scientifically accurate approach to calendar unification; nevertheless, its acceptance is obstructed by conventional perspectives and the practical challenges of crescent moon observation across many regions globally. A substantial portion of the discussion focuses on the necessity to reinterpret Islamic doctrines to align with scientific progress while also considering the socio-cultural commitment to *rukyat* in diverse Muslim groups.

D. Conclusion

Syamsul Anwar's Vision: Establishing a Unified Global Islamic Calendar Syamsul Anwar's efforts to unify the global Hijri calendar by integrating the hisab and rukyat methods represent a significant breakthrough in minimizing the differences in determining the start of the Hijri months, particularly within Indonesia. By implementing five fundamental principles—acknowledgment of hisab, transfer of imkanu rukyat, unity of matlak, global synchronization of days and dates, and recognition of the International Date Line—Anwar offers a solution with

[23]Muh Arif Royyani et al., "Shahadah 'Ilmy; Integrating Fiqh and Astronomy Paradigm in Determining The Arrival of Lunar Months in Indonesia", *Al-Ihkam: Jurnal Hukum dan Pranata Sosial*, vol. 16, no. 2 (Faculty of Shariah Institut Agama Islam Negeri Madura, 2021).

[24]Ahmad Adib Rofiuddin, "Dinamika Sosial Penentuan Awal Bulan Hijriah di Indonesia", *Istinbath*, vol. 8, no. 2 (2019), http://www.istinbath.or.id.

the potential to unite the Muslim community in terms of worship times, which have long caused divisions.

However, despite receiving support from several Islamic astronomy scholars, significant challenges remain, especially regarding the strong socio-cultural attachment to the rukyat method in various Muslim communities, such as Nahdlatul Ulama in Indonesia. This demonstrates that unifying the Hijri calendar is not merely an astronomical or technical issue but is also deeply intertwined with theological, cultural, and political perceptions that are firmly rooted.

On a global scale, similar obstacles are encountered, with Muslim-majority countries such as Saudi Arabia and Egypt and nations in Europe facing dilemmas in balancing traditional approaches with modern scientific advancements. Nevertheless, with further refinement and intensive dialogue between scholars, religious leaders, and the global Muslim community, this research provides a solid foundation that a unified and consistent global Hijri calendar is an achievable goal.

Moving forward, further steps are needed in the form of cross-national studies and dialogue between Islamic organizations to strengthen the global implementation of this method. This can be achieved through a more inclusive approach that addresses the social and theological needs of various Muslim communities while also encouraging the integration of religious traditions with modern scientific advancements.

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