

## Single Global Hijri Calendar (Unification of Worship Times and Muamalah Solution)

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### ABSTRACT

*The lack of a unified Hijri calendar continues to create differences in determining Islamic dates, resulting in variations in the timing of worship and muamalah activities among Muslims worldwide. This study examines the urgency of implementing a Single Global Hijri Calendar as a framework for achieving global calendar unification. The research employs a qualitative library research approach by analyzing classical and contemporary literature, scholarly publications, and official documents related to the development of the global Hijri calendar. The findings indicate the global Hijri calendar has significant potential to establish a unified Islamic dating system, enabling muslims around the world to observe religious rituals and conduct muamalah activities on the same day and date. Despite ongoing debates regarding its principles, criteria, and astronomical parameters, the concept provides a feasible foundation for strengthening global muslim unity. The study concludes that the implementation of the global Hijri calendar requires broader scholarly consensus and collaboration among Islamic institutions to ensure its universal acceptance and practical application.*

**Keywords:** *Hijri Calendar, Single Global Hijri Calendar, Muslim Unity, Muhammadiyah, Muamalah*

### ABSTRAK

*Perbedaan dalam penetapan awal bulan Hijriah masih menjadi tantangan bagi umat Islam di berbagai belahan dunia sehingga menyebabkan ketidaksamaan waktu pelaksanaan ibadah dan aktivitas muamalah. Penelitian ini bertujuan menganalisis urgensi unifikasi kalender Hijriah melalui konsep Kalender Hijriah Global Tunggal (KHGT) sebagai solusi penyatuan sistem penanggalan Islam secara global. Penelitian ini menggunakan metode penelitian kepustakaan (library research) dengan pendekatan kualitatif melalui analisis terhadap literatur klasik dan kontemporer, artikel ilmiah, serta dokumen resmi yang berkaitan dengan pengembangan Kalender Hijriah Global Tunggal. Hasil penelitian menunjukkan bahwa konsep KHGT memiliki potensi besar untuk mewujudkan kesatuan penanggalan Islam sehingga umat Islam di seluruh dunia dapat melaksanakan ibadah dan aktivitas muamalah secara serentak pada hari dan tanggal*



*yang sama. Meskipun masih terdapat perbedaan pandangan mengenai prinsip, syarat, dan parameter astronomi yang digunakan, konsep ini tetap memiliki peluang untuk diterapkan melalui penguatan konsensus ilmiah dan kerja sama antarlembaga Islam. Penelitian ini menyimpulkan bahwa implementasi KHGT merupakan langkah strategis dalam memperkuat persatuan umat Islam melalui penyatuan sistem kalender Hijriah secara global.*

**Kata Kunci:** Kalender Hijriah, Kalender Hijriah Global Tunggal, Muhammadiyah, Muamalah

## INTRODUCTION

The unification of the Hijri calendar has become one of the most important issues in contemporary Islamic astronomy due to its implications for determining the timing of religious observances and civil activities among Muslims worldwide. Differences in the criteria for determining the beginning of the lunar month have resulted in discrepancies in the observance of *Ramadan*, *Eid al-Fitr*, *Eid al-Adha*, and other Islamic dates across countries. These differences are not merely astronomical issues but also affect the social, legal, economic, and administrative aspects of Muslim societies<sup>1</sup>.

Numerous studies have discussed the development of the global Hijri calendar from both astronomical and Islamic legal perspectives. Syamsul Anwar emphasizes the need for a unified Islamic calendar based on the principle of *one day and one date* to strengthen the unity of the Muslim ummah<sup>2</sup>. Susiknan Azhari highlights the historical development of Hijri calendar reform and the challenges of integrating astronomical calculations with Islamic jurisprudence<sup>3</sup>. Meanwhile, international discussions culminated in the 2016 International Hijri Calendar Congress in Istanbul, which proposed the Single Global Hijri Calendar as a practical framework for achieving worldwide calendar unification.<sup>4</sup>

In Indonesia, Muhammadiyah has consistently promoted Hijri calendar reform as part of its *tajdid* (renewal) movement. During the 47th Muhammadiyah Congress held in Makassar on 3–7 August 2015, Muhammadiyah declared the unification of the Hijri calendar as one of its strategic agendas for strengthening the unity of Muslims. This commitment was further reinforced through Muhammadiyah's acceptance of the

<sup>1</sup> Pimpinan Pusat Muhammadiyah, "Tanfidz Keputusan Muktamar Muhammadiyah Ke-47," in *Berita Resmi Muhammadiyah* (Yogyakarta: Pimpinan Pusat Muhammadiyah, 2015), 1–131.

<sup>2</sup> Syamsul Anwar, "Unifikasi Kalender Hijriah Global Problem Dan Tantangan," *Al-Marshad: Jurnal Astronomi Islam Dan Ilmu-Ilmu Berkaitan* 2, no. 2 (2016).

<sup>3</sup> Susiknan Azhari, "Cabaran Kalender Islam Global Di Era Revolusi Industri 4.0," *Jurnal Fiqh* 18, no. 1 (2021): 117–34, <https://doi.org/10.22452/fiqh.vol18no1.4>.

<sup>4</sup> Hamdun, "Upaya Penyatuan Kalender Islam Internasional Oleh Organisasi Kerjasama Islam ( OKI )," *Jurnal Bimas Islam* 10, no. 3 (2017): 475.

decisions of the 2016 Istanbul Congress, which introduced the concept of the Single Global Hijri Calendar (at-taqwīm al-hijrī al-uḥādī). The calendar is based on the principle of *one day and one date throughout the world*, enabling Muslims to observe religious rituals and conduct civil (muamalah) activities simultaneously regardless of geographical location.

Although previous studies have examined the astronomical criteria, the jurisprudential foundations, and the historical development of the global Hijri calendar, most of them focus on technical aspects such as crescent visibility criteria, astronomical parameters, or legal arguments. Limited attention has been given to comprehensively examining the urgency of the Single Global Hijri Calendar as an integrative framework for unifying both worship schedules and global *muamalah* activities. Furthermore, discussions on the relationship between its principles, implementation requirements, and practical opportunities for worldwide adoption remain relatively limited.<sup>5</sup>

Therefore, this study aims to analyze the urgency of implementing the Single Global Hijri Calendar by examining its fundamental principles, implementation requirements, and astronomical parameters. Unlike previous studies that primarily discuss technical or jurisprudential issues separately, this paper provides an integrated analysis of how the Single Global Hijri Calendar can serve as a practical solution for achieving global unity in Islamic timekeeping while strengthening the synchronization of religious observances and civil activities among Muslims worldwide.

## METHOD

This study adopts a qualitative, conceptual research design to examine the formulation and prospective implementation of the Single Global Hijri Calendar as a unifying framework for determining worship times and *muamalah* activities among Muslims worldwide. The research is grounded in a normative-analytical approach, aiming to critically explore the theoretical, astronomical, and jurisprudential foundations of a globally unified Hijri calendar system.

The study relies on secondary data collected from a wide range of authoritative sources, including peer-reviewed journal articles, scholarly works in Islamic astronomy ('ilm al-falak), official documents issued by Muhammadiyah, and proceedings from international forums on Hijri calendar reform, particularly the 2016 Istanbul Congress.

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<sup>5</sup> Azhari, "Cabaran Kalendar Islam Global Di Era Revolusi Industri 4.0."

These sources provide a comprehensive basis for understanding both classical and contemporary perspectives on Hijri calendar unification.

Data analysis is conducted using a descriptive-analytical method. This involves systematically identifying the core principles, conditions, and parameters underlying the model, followed by a critical comparison with alternative calendar systems, such as the bizonal approach. Through this analysis, the study assesses the conceptual coherence, strengths, and limitations of in addressing the long-standing issue of global date discrepancies in Islamic practices.

The analytical framework of this study integrates three interrelated perspectives. First, the astronomical perspective examines the scientific basis of lunar visibility and its implications for establishing a global calendar. Second, the sharia perspective evaluates the compatibility of the proposed system with Islamic legal principles governing the determination of lunar months. Third, the socio-global perspective highlights the necessity of temporal unity in facilitating synchronized religious observances and socio-economic activities among Muslims across different regions.

The findings are interpreted through an interdisciplinary lens that combines insights from Islamic jurisprudence, astronomy, and contemporary global dynamics. Nevertheless, this study is limited to a conceptual analysis and does not incorporate empirical validation or field-based investigation. Consequently, the conclusions focus on the theoretical feasibility and potential applicability of the as a solution for achieving global unification of Hijri dates<sup>6</sup>.

## DISCUSSION

### Global Hijri Calendar

The Single Global Hijri Calendar, also known as *at-taqwīm al-hijrī al-uḥādī*, is a lunar calendar based on the principle of one day and one date worldwide. It differs from other global hijri calendars that the proposer and designers claim to be global or universal hijri calendars but are still zonal. A zonal calendar is a calendar that divides the Earth's surface into several date zones. For example, the calendar by an astronomer from Malaysia, Mohammad Ilyas, compiles the global calendar that divides the Earth's surface into three zones, namely the Southeast Asian zone, the Middle East zone (*including Europe*), and the American continental zone where in each zone a calendar

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<sup>6</sup> Muhammad Hidayat et al., "Peningkatan Pemahaman Kalender Hijriah Global Tunggal Kepada Warga Muhammadiyah Cabang Medan Helvetia," *Ihsan: Jurnal Pengabdian Masyarakat* 6, no. 1 (2024), <https://doi.org/10.30596/ihsan.v>.

system applies for each zone<sup>7</sup>. Meanwhile, Muhammad Shaukat Audah (odeh) designed a universal (international) hijri calendar system with the concept of dividing the face of the Earth into two date zones, each with its date. The two calendar systems above are trizonal and bizonal calendars<sup>8</sup>.

Based on the calendar system described above, namely trizonal and bizonal, it has not been able to fully unite Muslims around the world in carrying out their worship times simultaneously as in starting the beginning of *Ramadan, Shawwal, and Zulhijah* as well as civil-administrative activities<sup>9</sup>. For this reason, there is a need for a more comprehensive calendar or time organization system to unite Muslims worldwide and determine the times of worship and *muamalah* activities.

The Single Global Hijri Calendar developed by Muhammadiyah is the result of the formulation of the Turkey Muktamar in 2016, namely *Mu'tamar Tauhid at-Taqwim al-Hijry ad-Dauli* organized by the Ministry of Religious Affairs of Turkey in order to follow up on the recommendations of the Organization of Islamic Cooperation (OIC) in its Congress in 2008 so that a study was carried out in the application of the global hijri calendar to improve the image of Islam which is seen as time management that is backwards in the world. Indonesia, especially Muhammadiyah, has ratified the OIC recommendation and has actively responded to it through various studies, activities, research, and international meetings discussing the unification of the Islamic calendar.

The Single Global Hijri Calendar developed by Muhammadiyah is a lengthy research project that tests its accuracy. It has been issued or published as a prototype for 100 years. Therefore, in order to accelerate the needs of Muslims in organizing a unification time management system, Muhammadiyah developed the Decision of the 2016 Turkey Muktamar, which was used as part of the Principles, Terms and Parameters of the international calendar system, namely the Single Global Hijri Calendar. According to Muhammadiyah, several basic principles, conditions, and parameters must be accepted and attached to realize an international dating system, the Single Global Hijri

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<sup>7</sup> Ahmad Ainul Yaqin, "Peluang Dan Tantangan Kalender Islam Internasional Mohammad Ilyas," *Journal of Islamic Astronomy* 1, no. 1 (2020): 32–51.

<sup>8</sup> Anisah Budiwati, "Telaah Awal Kalender Hijriah Global Tunggal Jamaluddin ` Abd Al-Razik ( Sebuah Upaya Menuju Unifikasi Kalender )," *Jurnal Bimas Islam* 10, no. 3 (2017): 407–30, <https://jurnalbimasislam.kemenag.go.id/jbi/article/view/29/28>.

<sup>9</sup> Arwin Juli Rakhmadi Butar-Butar and Muhammad Hidayat, "The Issues and Prospects of the Global Islamic Calendar," *Proceedings of the International Conference on Community Development (ICCD 2020)* 477, no. Iccd (2020): 109–12, <https://doi.org/10.2991/assehr.k.201017.025>.

Calendar. The Principles, Conditions and Parameters in realizing the Single Global Hijri Calendar are<sup>10</sup>:

## 1. Principles of the Single Global Hijri Calendar

### 1.1. Use and Acceptance of Hisab

In determining the beginning of the Hijri month, *hisab* has the same status as *rukyat* (according to the decision of the XXVI Muhammadiyah Tarjih Congress held in Padang, West Sumatra, in 2003/1424 H). Therefore, using the *hisab* method to determine the beginning of the month of Kamariah is valid and follows the Sunnah of the Prophet SAW. *Hisab* and *Rukyat* can be used to determine the beginning of the Hijri month. However, in this case, Muhammadiyah views *hisab* as a means that provides more certainty in determining the beginning of the month so that the use of *hisab* must take precedence over *rukyat*<sup>11</sup>. It is impossible to make and compile a good calendar using *rukyat*<sup>12</sup>. The impossibility is due to the limitations of *rukyat* in determining the date of the 1<sup>st</sup> of the new month, which can only be known on D-1 or at the time of observing the new moon. On the other hand, the creation and preparation of a calendar must have the ability and certainty to predict or estimate exact dates far in the future and be able to present a calendar for at least one year in the future<sup>13</sup>.

*Mu'tamar Al-Imārāt Al-Falaki al-Awwal's Abu Dhabi* (1427 H/2006 M) decided to solve the problem of the Islamic calendar cannot be done except for the acceptance and use of *hisab* in determining the beginning of the Hijri month as well as the use of *hisab* in determining prayer times and other worship times<sup>14</sup>. In Single Global Hijri Calendar, the existence of *hisab* is seen as providing more certainty than using *rukyat* in determining the beginning of the Hijri month.

In the use of *hisab*, Jamaluddin Abdur Razik said: "The purpose of performing *rukyat*, namely factual *rukyat*, is to get certainty about the entry of the new moon,

<sup>10</sup> Syamsul Anwar, "Unifikasi Kalender Hijriah Global Problem Dan Tantangan Syamsul Anwar UIN Sunan Kalijaga Yo," *Al Marshad: Jurnal Astronomi Islam Dan Ilmu-Ilmu Berkaitan* 2, no. 2 (2016).

<sup>11</sup> Hariyadi Putraga Ritonga, Marataon, Arwin Juli Rakhmadi, Muhammad Hidayat, "Problematika Penentuan Hari Tarwiyah Dan Arafah Serta Solusinya," *Astroislamica: Journal of Islamic Astronomy* 2, no. 1 (2023): 91–105.

<sup>12</sup> Marataon Ritonga et al., "Transformasi Hisab-Rukyat Dalam Penentuan Awal Bulan Hijriah Di Muhammadiyah," *Al-Hikmah: Jurnal Agama Dan Ilmu Pengetahuan* 21, no. 1 (2024).

<sup>13</sup> Tono Saksono Syamsul, Anwar, *Halaqah Nasional Ahli Hisab Dan Fikih Muhammadiyah* (Yogyakarta: Majelis Tarjih dan Tajdid PP Muhammadiyah, 2016).

<sup>14</sup> Muhammad Himmatur Riza, "Kriteria Kalender Hijriah Global Tunggal Turki 2016 Perspektif Tim Hisab Rukyat Kementerian Agama RI," *Elfalaky* 2, no. 1 (2018): 30–47.

following the principle that affirms that we will not start a worship except with faith and we do not end a worship except based on faith."

From the above statement, it can be understood that *rukyat*, in Jamaluddin's view, is only as *wasilah* (means) to determine the beginning of the new Hijri month. It seems that the determination of the beginning of the prayer time in the Hadiths of the Prophet SAW is based on seeing; at present, all Muslims know the beginning of the prayer time based on astronomical calculations. Therefore, *hisab*, as a means of providing more certainty in determining the beginning of the month, should take precedence over using *rukyat*<sup>15</sup>.

The formulation of *Imkanu Rukyat* 5-8 (hilal height 5 degrees and elongation angle 8 degrees) that has been formulated and agreed upon in the Single Global Hijri Calendar in its implementation is definitive. It means that when there is a failure in carrying out the *rukyat* hilal when the position of the hilal has reached 5-8 in a place, anywhere, then it does not affect the decision and determination of the beginning of the month in the context of Single Global Hijri Calendar. The postulates of the Quran can be used as a guideline in using *hisab* to make a calendar, as Allah says in Q.S. ar-Rahman verse 5 and Q.S. Yunus verse 5

الشَّمْسُ وَالْقَمَرُ بِحُسْبَانٍ

*The sun and the moon [move] by precise calculation.*

هُوَ الَّذِي جَعَلَ الشَّمْسُ ضِيَاءً وَالْقَمَرَ نُورًا وَقَدَرَهُ مَنَازِلَ لِتَعْلَمُوا عَدَدَ السِّنِينَ وَالْحِسَابَ مَا خَلَقَ اللَّهُ ذَلِكَ إِلَّا بِالْحَقِّ يُفَصِّلُ الْآيَاتِ لِقَوْمٍ يَعْلَمُونَ

*It is He who made the Sun a shining light and the moon a derived light and determined for it phases - that you may know the number of years and account [of time]. Allah has not created this except in truth. He details the signs for people who know.*

The two verses above explain that Allah SWT makes the Sun and the moon shine. Then Allah SWT sets the positions so that humans can know the time calculation. The assertion that the circulation of the Sun and moon can be calculated is not just information but a signal to be used for determining the number of years and calculating

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<sup>15</sup> Jamaluddin Abdurrazziq, *Al-Taqwim Al-Qamari Al-Islami Al-Muwahhad* (Rabat: Marsam, 2004).

time in general <sup>16</sup>. If you look at the history of the calendar system, humans cannot be separated from the use of the Sun and moon, even though they use different methods and systems in determining the date <sup>17</sup>.

### 1.2. Transfer Facility Rukyat

*Imkanu Rukyat* hilal (visibility of the hilal) is an astronomical prediction of the appearance of the hilal in a specific geometric position. This means that starting a new moon is invalid if the *imkanu rukyat* has not occurred somewhere on Earth's surface. The adoption of *imkanu rukyat* is mandatory to keep the easternmost region of the world from being forced into the new moon before *ijtimak*/conjunction occurs in that place.

The transfer of *imkanu rukyat* is to move the results of rukyat somewhere where it is possible to see the hilal to another place where it is impossible to see the hilal. In another sense, the transfer of *imkanu rukyat* is the imbanning of *imkanu rukyat* to other areas that have not experienced *imkanu rukyat*. This *imkanu rukyat* transfer is applied thoroughly in all world regions; there is no specialization for a specific region, such as in the calendar system that divides the Earth's surface into several zones.

The evidence that can be used in using the transfer of *imkanu rukyat* to all corners of the Earth's surface, according to the jurists, is related to the generality of the hadith

عَنْ أَبِي هُرَيْرَةَ رَضِيَ اللَّهُ عَنْهُ؛ إِنَّ النَّبِيَّ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ قَالَ صُومُوا لِرُؤْيَيْهِ وَأَفْطِرُوا لِرُؤْيَيْهِ. فَإِنْ غُمِّيَ عَلَيْكُمْ فَأَكْمَلُوا الْعِدَّةَ [رواه مسلم]

*From Abu Hurairah fasting because you see the new moon and breaking your fast because you see it. If your vision is cloudy, then perfect the number.*

Based on the generality of the above Hadith, all Muslims on the surface of the Earth are obliged to carry out fasting if *rukya*t has occurred (*including imkanu rukyat*) without any restrictions on the validity of the rukyat so that wherever *rukya*t and *imkanu rukyat* occur on the surface of the Earth, all Muslims must start fasting. Concerning the use of Single Global Hijri Calendar, there is no difference between *matlak*. The entire world region becomes one unit and jurisdiction in determining the beginning of the Hijri month.

<sup>16</sup> Majelis Tarjih dan Tajdid Pimpinan Pusat Muhammadiyah, *Unifikasi Kalender Hijriah* (Yogyakarta: Majelis Tarjih dan Tajdid PP Muhammadiyah, 2015).

<sup>17</sup> Musa Al-Azhar, "Kalender Hijriah Dalam Al-Qur'an," *Al-Marshad: Jurnal Astronomi Islam Dan Ilmu-Ilmu Berkaitan* 5729, no. December (2018): 227–41.

### 1.3. *Matlak Union*

1.4. In Single Global Hijri Calendar, the unity of the Earth refers to the concept that the entire surface of the Earth is a single unit. Therefore, the concept of diversity of *matlak* or *ikhtilāf al-maṭālī'* is something that cannot be guided like a zonal calendar that divides the Earth's surface into several different date zones or *matlak*. The impact is that aligning the new date's fall on the same day is impossible. Therefore, in this case, the Single Global Hijri Calendar has only one date zone covering the Earth's entire surface.

In realizing Single Global Hijri Calendar, the acceptance of global *matlak* is something that must and is attached because if it still adheres to local *matlak*, it will not be possible to realize the fall of the first day of the Hijri month on the same day on the entire surface of the Earth. This is because the appearance of the new moon when it first appears or is seen somewhere is minimal.

The global *matlak* in the view of *fuqaha*, namely <sup>18</sup>:

1. The Maliki school states that if the hilal has been seen in an area based on the testimony of two or more people, then the testimony is applied to all Muslims, both near and far. This means that the Maliki *madzhab* supports the implementation of the global *matlak*.
2. The Hanabilah school states that if the hilal has been seen anywhere on the Earth's surface, both near and far, then all Muslims must be fasting. In this context, people who cannot see the hilal or the hilal still below the horizon are considered to have seen the hilal.
3. The Hanafiyah school states that if the rukyat in the western hemisphere succeeds in seeing the hilal, then Muslims in the eastern hemisphere follow and use the results of the *rukyat* from the western part, with the record of the *rukyat* or the visibility of the hilal determined accurately.
4. The Shafi'i mazhab is more inclined to use local *matlak*. If the hilal is seen in an area, its validity is only for adjacent areas. It cannot be used for distant areas; in this case, there is a difference in *matlak*. This is a valid opinion of the Shafi'i mazhab.

There is a difference in understanding *matlak* because there is a difference in understanding and interpreting the hadiths of the Prophet SAW about determining the beginning of the Hijri month. In this case, each has its arguments according to the

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<sup>18</sup> Arwin Juli Rakhmadi Butar-Butar, "Matlak Menurut Fukaha," OIF UMSU, 2024, <https://oif.umsu.ac.id/2024/03/matlak-menurut-fukaha/>.

understanding and interpretation of the relevant Hadith<sup>19</sup>. The following is a hadith that raises the difference in *matlak*, the Hadith of Kuraib<sup>20</sup>.

عَنْ مُحَمَّدِ بْنِ أَبِي حَرْمَلَةَ عَنْ كُرَيْبٍ: أَنَّ أُمَّ الْفَضْلِ بِنْتَ الْحَارِثِ بَعَثَتْهُ إِلَى مُعَاوِيَةَ بِالشَّامِ قَالَ كُرَيْبٌ: فَقَدِمْتُ الشَّامَ فَقَضَيْتُ حَاجَتَهَا وَاسْتَهَلَّ عَلَيَّ رَمَضَانٌ وَأَنَا بِالشَّامِ فَرَأَيْتُ الْهِلَالَ لَيْلَةَ الْجُمُعَةِ ثُمَّ قَدِمْتُ الْمَدِينَةَ فِي آخِرِ الشَّهْرِ فَسَأَلَنِي عَبْدُ اللَّهِ بْنُ عَبَّاسٍ رَضِيَ اللَّهُ عَنْهُمَا ثُمَّ ذَكَرَ الْهِلَالَ فَقَالَ: مَتَى رَأَيْتُمُ الْهِلَالَ؟ فَقُلْتُ: رَأَيْنَاهُ لَيْلَةَ الْجُمُعَةِ فَقَالَ: أَنْتَ رَأَيْتَهُ؟ فَقُلْتُ: نَعَمْ وَرَأَاهُ النَّاسُ وَصَامُوا وَصَامَ مُعَاوِيَةُ فَقَالَ: لَكِنَّا رَأَيْنَاهُ لَيْلَةَ السَّبْتِ فَلَا نَزَالَ نَصُومُ حَتَّى نَكْمَلَ الثَّلَاثِينَ أَوْ نَرَاهُ فَقُلْتُ: أَوْ لَا تَكْتَفِي بِرُؤْيَا مُعَاوِيَةَ وَصِيَامِهِ؟ فَقَالَ: لَا هَكَذَا أَمَرَنَا رَسُولُ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ (رواه مسلم)

*From Muhammad bin Abi Harmalah from Kuraib, that um al-Fadhl bint al-Harith sent Kuraib to meet Mu'awiyah in Sham. Kurabib said: I have arrived in Sham. Then I fulfilled umm al-Fadhl's needs. And I saw the new moon of Ramadan while I was still in Sham. I saw the new moon on Friday night. Then, I arrived in Medina at the end of Ramadan. Abdullah bin Abbas asked me, and he mentioned the hilal. He said: "When did you see the new moon?" I said: "Friday night." He asked: "Did you see it yourself?" I replied: "Yes, and people see it too. They fast, as well as Mu'awiyah." He said: "But we see the new moon on Saturday night, so we continue to fast until we complete 30 days or we see the new moon". I asked: "Is it not enough to follow the rukyat of Mu'awiyah and its fast?" Then he replied: "No, so the Prophet (peace and blessings of Allaah be upon him) told us. (HR. Muslim).*

The above Hadiths is used as the basis for the difference in *matlak* according to some scholars who cannot complete the hadith *sumu liru'yatihi*. The above Kuraib hadith is seen as Ibn 'Abbas's vow/takwil towards the hadith *sumu liru'yatihi*. Al-Kiyat at-Tabari (d. 504/1110) stated, "Ibn 'Abbas's statement 'Thus the Prophet SAW commanded us' (in the Hadith of Kuraib) can be interpreted as his takwil to the Hadiths of the Prophet SAW, "Fasting for seeing the new moon and *Eid al-Fitr* for seeing it"<sup>21</sup>. Therefore, the majority of scholars hold the generality of hadith *sumu liru'yatihi*. To affirm the unity of *matlak*, deny the existence of differences in *matlak* and declare that the Hadith of Kuraib cannot be takhsis to the hadith *sumu liru'yatihi*.

<sup>19</sup> Andi Intan Nur Cahyani Fikri, Haekal, Muh. Rasywan Syarif, "Analisis Matlak Dalam Penentuan Awal Bulan Hijriah Perspektif Ilmu Falak," *Hisabuna* 4 (2023): 65–83.

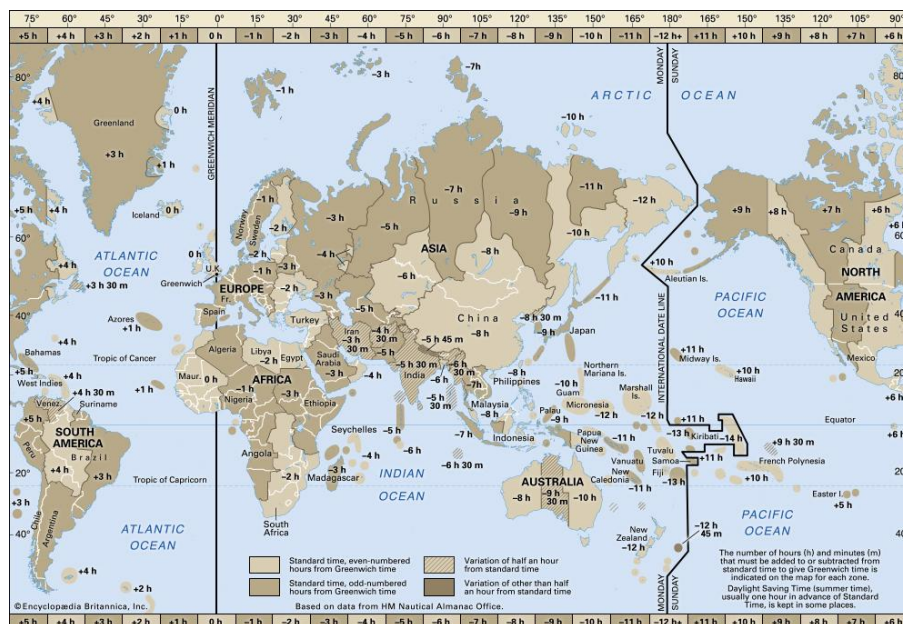
<sup>20</sup> Syekh Khalil Ma'mun Syiha, *Muslim Bin Al-Hajjaj, Shahih Muslim* (Beirut: Dar al-Ma'rifah, 2005).

<sup>21</sup> Majelis Tarjih dan Tajdid Pimpinan Pusat Muhammadiyah, *KHGT (Kalender Hijriah Global Tunggal): Konsep, Argumen Dan Implementasinya* (Yogyakarta: Majelis Tarjih dan Tajdid PP Muhammadiyah, 2024).

### 1.5. International Date Line Acceptance

The beginning of the day in Single Global Hijri Calendar refers to the world agreement on the day, which is universal time, whereby the day begins and ends at midnight at 180 degrees longitude. The universal day is from 00:00 to the next 00:00 around the world. The implementation of the acceptance of the international date line refers to the date of the year which uses the international date line as the boundary for the change of day and the date where the change of day occurs at midnight in turn from the international date line running in the direction of longitude to the east<sup>22</sup>.

As stated by Jamaluddin Abdul Raziq, an astronomer from Morocco, the Hijri and Miladiyah calendars must have similarities in terms of the use of international dates, namely at 180 degrees (in the middle of the Pacific Ocean) from GMT (*Greenwich Mean Time*)<sup>23</sup>. De facto, Muslims on the Earth's surface have accepted the international date line at that longitude.



The image above shows that the north-south winding line that passes through the Pacific Ocean on the right of the map above is an international date line. The line limits two days/dates where the day in the western area (left) of the line crosses the day in the eastern area (right) of the one-day line.

<sup>22</sup> Fahmi Fatwa Rosyadi Satria Hamdani Setyanto, Hendro, "Independent Calendar as International Hijriah Calendar Basic Unity," *Jurnal Bimas Islam* 10, no. 3 (2017): 431–50.

<sup>23</sup> Ahmad Adib Rofiuddin, "Penentuan Hari Dalam Sistem Kalender Hijriah," *Al-Ahkam* 26, no. 1 (2016): 117, <https://doi.org/10.21580/ahkam.2016.26.1.878>.

## 2. Single Global Hijri Calendar Requirements:

### 2.1. *Single Global Hijri Calendar must include aspects of worship and muamalah*

The need for Muslims regarding time management (calendar) that applies internationally is to standardize the carrying out of various religious rituals and *muamalah* (civil-administrative) activities. Thus, the Single Global Hijri Calendar requirements must cover the matter of worship and scheduling worship times, especially in determining fasts and holidays, and at the same time, must also consistently include the scheduling of civil-administrative activities and muamalah. If the existence of the Single Global Hijri Calendar is only used for worship, then the narrative of "unification" that is always called for and echoed has no importance. The provisions of the calendar must include worship and muamalah, as stated by Allah SWT in Q.S. al-Baqarah verse 189

يَسْأَلُونَكَ عَنِ الْأَهِلَّةِ ۚ قُلْ هِيَ مَوَاقِيتُ لِلنَّاسِ وَالْحَجِّ

*It means, "They ask you about ahillah, say that ahillah is a sign of time for people and the hajj" (QS. Al-Baqarah [02]: 189).*

The word "*lin-nas*" in the above verse indicates the universality and universal applicability of all humans on the surface of this Earth. This means the Islamic time system (calendar) must be global, not local. Meanwhile, the word "*lil-hajj*" (for hajj) in the above verse shows that the moon's phases help determine the time of the *hajj*. This hints at the worship function of the calendar.

It can be seen that the function of the hilal is used as a sign for humans (civil-administrative muamalah management) and as a sign for the *hajj* pilgrimage (management of the time of worship represented by the *hajj*). Thus, the social and the worship functions are units that must be inherent and exist in compiling a calendar. Thus, an established calendar had to cover human affairs in general, namely the issue of worship and muamalah.

### 2.2. *The Islamic calendar must be based on the cycle of the Qamariah, where the duration is no more than 30 days and not less than 29 days.*

The words of Allah SWT in Q.S. al-Baqarah verse 189 provide an understanding of Muslims' need for a time scheduling system (calendar) based on the hilal for the sake of worship and muamalah activities. Meanwhile, the Quran also explains the time scheduling system (calendar), which consists of 12 months in a year, four of which are haram months. As Allah SWT says in Q.S. at-Taubah verse 36

إِنَّ عِدَّةَ الشُّهُورِ عِنْدَ اللَّهِ اثْنَا عَشَرَ شَهْرًا فِي كِتَابِ اللَّهِ يَوْمَ خَلَقَ السَّمُوتِ وَالْأَرْضَ مِنْهَا أَرْبَعَةٌ حُرُمٌ ذَلِكَ الدِّينُ الْقَيِّمُ فَلَا تَظْلِمُوا فِيهِنَّ أَنْفُسَكُمْ وَقَتِلُوا الْمُشْرِكِينَ كَافَّةً كَمَا يُقْتُلُونَكُمْ كَافَّةً وَاعْلَمُوا أَنَّ اللَّهَ مَعَ الْمُتَّقِينَ

*Indeed, the number of months with Allah is twelve [lunar] months in the register of Allah [from] the day He created the heavens and the Earth; of these, four are sacred. That is the correct religion, so do not wrong yourselves during them. And fight against the disbelievers collectively as they fight against you collectively. And know that Allah is with the righteous [who fear Him].*

2.3. *There has been ijtimak (conjugation) on the entire surface of the Earth. The Islamic calendar should not make a group of Muslims in a region of the Earth enter the new moon before Ijtimak occurs.*

*Ijtimak* is a phenomenon where the moon is between the Sun and the Earth, and the face of the moon is not visible from the Earth. *Ijtimak* is when the moon and the Sun are at the same longitude position when viewed from the East or West. Astronomers agree that the occurrence of *ijtimak* events is the limit of astronomical determination between the current month of *Kamariah* and the next month of *Kamuiyah*. Thus, the occurrence of *ijtimak* or conjunction is a condition and standard for the beginning of the month of *Kamariah*. As Allah SWT said in Q.S., the *ijtimak* event also indicates that a dynastic circulation has been completed around the Earth. Yasin verse 39:

وَالْقَمَرَ قَدَرْنَاهُ مَنَازِلَ حَتَّىٰ عَادَ كَالْعُرْجُونِ الْقَدِيمِ

*And the moon we have determined for it phases until it returns [appearing] like the old date stalk.*

The verse explains that a cycle of the moon's circulation through its phases starts from the state as a "form of old sign" to return to its original state. The above verse also hints that the beginning of a new moon is when the moon has returned to its smallest or thinnest shape; the surrounding moon achieves the smallest or thinnest shape at the time of *ijtimak* (conjunction), that is, when the Sun and moon have the same celestial longitude <sup>24</sup>.

<sup>24</sup> Bustanul Iman RN, "Penetapan Awal Bulan Qamariyah Perspektif Fiqh," *Jurnal Hukum Diktum* 14, no. 1 (2016): 1–28.

Based on the conditions of Single Global Hijri Calendar, it can be understood that Muslims in a place should not enter the new month while *ijtimak* (conjunction) has not yet occurred. According to the above verse, it is also emphasized that the occurrence of *ijtimak* ensures that the number of Qamariah months is not less than 29 days and not more than 30 days.

*2.4. The Islamic calendar must be unifiable, providing one day and one date worldwide.*

The practice and application of Single Global Hijri Calendar must be global-unofficial in the sense of adhering to one day and date worldwide. With the global nature of the Single Global Hijri Calendar, it is believed that several things must be reconstructed, such as understanding the position of the hilal, which is still below the horizon and using hisab in total. The round shape of the Earth and the uneven visibility of the hilal over the entire surface of the Earth cause the need for *ijtihad* and a new way of looking at things, as long as they do not contradict the postulates of the Quran and the Sunnah. The global nature of Single Global Hijri Calendar reflects the unity and universalism of Islamic teachings. It is also the implementation that Islam is a religion that is a blessing for all nature and all humans, as Allah says in Q.S. al-Anbiya' verse 92, Q.S. al-Mu'minun verse 52 and Q.S. al-Anbiya verse 107:

إِنَّ هَذِهِ أُمَّةٌ وَاحِدَةٌ وَأَنَا رَبُّكُمْ فَاعْبُدُونِ

*Indeed this, your religion, is one religion, and I am your Lord, so worship Me.*

وَإِنَّ هَذِهِ أُمَّةٌ وَاحِدَةٌ وَأَنَا رَبُّكُمْ فَاتَّقُونِ

*And indeed this, your religion is one religion, and I am your Lord, so fear Me.*

وَمَا أَرْسَلْنَاكَ إِلَّا رَحْمَةً لِّلْعَالَمِينَ

*And We have not sent you, [O Muhammad], except as a mercy to the worlds*

It can be seen that the above verses require the existence and importance of uniformity of Muslims in various aspects, both for worship activities and muamalah activities. In order to realize the uniformity of Muslims in carrying out religious rituals and muamalah activities, Muslims must immediately adopt an unofficial calendar, Single Global Hijri Calendar, in this case.

### 2.5. *Imkan Rukyat*

The Islamic calendar should not make a group of Muslims in an area on the surface of the Earth enter the new moon before it is certain that the *imkanu rukyat* hilal will occur somewhere on the Earth.

The Single Global Hijri Curriculum accommodates and considers *hisab* and *rukya*t simultaneously. This can be seen from the taking and setting of the threshold (*imkanu rukya*t) known as 5-8 (the height of the hilal is 5 degrees, and the elongation angle is at least 8 degrees). So, Single Global Hijri Calendar should not make Muslims on the surface of the Earth enter the new moon before the occurrence of *imkanu rukya*t somewhere, anywhere. The condition of this *imkanu rukya*t is to place *rukya*t and *imkanur rukya*t in an equal position and portion. As is known, the understanding of *rukya*t, as well as *imkanu rukya*t, is still strongly guided by Muslims in the world today. Therefore, the *imkanu rukya*t 5-8 parameter selection in the Single Global Hijri Calendar is a compromise between *hisab* and *rukya*t or between *rukya*t and *imkanu rukya*t.

2.6. *It is not permissible to hold a group of Muslims in an area of the Earth from entering the new moon while the new moon has been displayed on their horizon.*  
As the Hadith of the Prophet SAW

إذا رأيتم الهلال فصوموا وإذا رأيتموه فأفطروا (رواه البخاري)

*If you see the hilal, fast, and if you see it, then it will be a day (HR. Al-Bukhari).*

The above hadith affirms that once the new moon has been sighted, the beginning of the new month is declared. However, the hadith expresses this ruling in general terms; that is, it does not specify any particular location. Therefore, Muslims in any region where the new moon has fulfilled the *imkān al-ru'yah* (5°–8°) criteria should not delay the beginning of the new month simply because the criterion has not been fulfilled in other regions.

## 3. Single Global Hijri Calendar Parameters/Criteria

### 3.1. *The whole world is one match.*

Where the beginning of the Hijri month (the first day) begins simultaneously on the entire surface of the Earth, this parameter is a fundamental thing and, at the same time, a characteristic of Single Global Hijri Calendar. The basis for using this parameter

is through concepts and contexts related to unity or unification, as affirmed by Allah SWT in Q.S. Al-Anbiya verse 92 and Q.S. Al-Mu'minin verse 52.

إِنَّ هَذِهِ أُمَّتُكُمْ أُمَّةً وَاحِدَةً وَأَنَا رَبُّكُمْ فَاعْبُدُونِ

*Indeed this, your religion, is one religion, and I am your Lord, so worship Me.*

وَإِنَّ هَذِهِ أُمَّتُكُمْ أُمَّةً وَاحِدَةً وَأَنَا رَبُّكُمْ فَاتَّقُونِ

*And indeed this, your religion, is one religion, and I am your Lord, so fear Me.*

3.2. *A new moon begins when any part of the Earth before 00:00 GMT has met the criteria of at least 8 degrees of elongation and 5 degrees of altitude.*

The reason for determining before 00:00 GMT refers to the parameters in the second phase of the Ummul Qura calendar (1393 H/1973 M to 1419 H/1998 M), which means that if the moon-sun conjunction occurs before 00:00 (midnight) according to universal time (GMT), then that night and the next day are called new moons.

Meanwhile, the visibility or fulfilment of the threshold of 5-8 occurs anywhere for the first time, not in a particular place, and does not require it to be seen on the entire surface of the Earth (country); it refers to the decision of the 1978 Istanbul Congress (point 4) which explains that to determine the beginning of the new moon is not based on the *rukyat* of a particular place but anywhere.

3.3. *Calendar correction: if the above criteria are met after midnight (00:00) GMT, then the new month will still start with the following conditions:*

- a. If the *imkanu rukyat* hilal elongation of 8 degrees and the height of 5 degrees has occurred somewhere in the world and *ijtimak* in New Zealand occurs before dawn
- b. The *imkanu rukyat* (as in letter a) occurs on the mainland of the American continent

The basis for determining *ijtimak* in New Zealand is because this country is considered the easternmost region of the world (from longitude 180° East Longitude), while the American continent is considered the westernmost region of the world (from longitude 180° West Longitude).

## CONCLUSION

The Single Global Hijri Calendar is a means of time management for Muslims, which is very important to be able to realize unity in carrying out religious moments and civil-administrative muamalah activities unificative in the environment of Muslims around the world. The presence of Single Global Hijri Calendar is in line with the guidance of *maqasid sharia*, which emphasizes the importance of the principle of unity, namely unity in the management of the time system and has the support of the Hadith of the Prophet SAW.

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