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Research Article

The Relevance of the 2016 Turkish Criteria and its Implications for Determining the Beginning of the Lunar Months in Indonesia

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Abstract: The determination of the beginning of the lunar month is an important issue in religious practice and the establishment of the *Hijri* calendar in Indonesia. The diversity of *imkan rukyat* criteria used across countries necessitates an evaluation of international standards, including the 2016 Turkish Criteria, which are considered more progressive with parameters of a minimum crescent altitude of 5° and an elongation of 8°. This article examines the relevance of the 2016 Turkish Criteria within the astronomical and jurisprudential context of Indonesia, as well as its implications for the process of determining the beginning of the lunar month by the government and Islamic organizations. Through literature review, comparative astronomical analysis, and examination of *hisab–rukyat* practices in recent years, this study finds that the 2016 Turkish Criteria exhibit strong astronomical consistency and can enhance calendar predictability. However, its application in Indonesia may lead to discrepancies with the government's criteria, which currently require a crescent altitude of 3° and an elongation of 6.4°. These implications include potential differences in month beginnings, the need for harmonizing criteria, and the importance of dialogue between national and international astronomical authorities. This study recommends strengthening astronomical and jurisprudential assessments prior to adopting new criteria and encourages the integration of global data to improve the accuracy of the *Hijri* calendar in Indonesia.

Keywords: Astronomical Analysis; Hijri Calendar; Lunar Month; *Rukyat* Criteria; Turkish Criteria

1. Introduction

The determination of the beginning of the lunar month is a classic issue that continues to be discussed in Islamic scientific tradition to this day. Since the early days of Islam, the method of *rukyat* direct observation of the visibility of the crescent moon has been the main basis for determining the start of a new month. However, developments in astronomy and the need for a more precise calendar have led to various new approaches to understanding the phenomenon of the crescent moon (Sabiq, 2022). These different methods often result in differences in the start of the month in different regions, especially when the crescent moon is not clearly visible or weather conditions are unfavorable (Yunus, 2025).

In modern times, Muslims face a variety of approaches to determining the beginning of the month. Some adhere strictly to pure *rukyat*, some use *hisab imkanur rukyat* as a criterion based on statistics of crescent visibility, and others have developed international criteria based on global visibility. Each approach has strong astronomical arguments and *Sharia* foundations, but these differences in approach often lead to differences in the start of the month, especially during important moments such as *Ramadan*, *Shawwal*, and *Zulhijjah* (Admin Website, 2024; Herman & Gassing, 2024; Yunus, 2025).

The pure *rukyat* approach prioritizes direct observation of the crescent moon without referring to minimum astronomical parameters. This approach is used in a number of countries, particularly in the Middle East. Meanwhile, the *hisab imkanur rukyat* approach combines astronomical data and empirical crescent visibility data, such as the Meeting of Ministers of Religious Affairs of Brunei, Indonesia, Malaysia, and Singapore (MABIMS) criteria, which initially used parameters of 2°–3° and has now been updated to a minimum crescent height

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of 3° and an elongation of 6.4°. Although more measurable, this approach does not necessarily eliminate differences, because the crescent is not always easy to observe even if it meets the *hisab* criteria (BRIN, 2023; Fitriyani & Isfihani, 2024).

As awareness of the need for a more uniform global Islamic calendar has grown, several countries have begun to develop international criteria that can be applied across regions. One important product of these efforts is the 2016 Turkish Criteria, also known as the Istanbul Criteria, which was developed in an international scientific forum. These criteria formulate minimum parameters for crescent visibility that can be applied globally and provide a new approach based on modern astronomical data.

The 2016 Turkish Criteria are based on pure *hisab*, taking into account the visibility of the crescent moon from a global perspective. Under these criteria, the start of the month can be determined simultaneously across the globe when the crescent moon is confirmed to be visible in anywhere in the earth according to astronomical calculations. Thus, these criteria adopt a global crescent visibility pattern, which differs from the regional or local approaches used by most Southeast Asian countries, including Indonesia (Hidayat, 2018; Nursodik, 2018).

In the literature review, a number of studies have discussed the effectiveness of the 2016 Turkish criteria and compared them with other criteria such as Yallop, Odeh (ICOP), and MABIMS. These studies show that the Turkish criteria have relatively lower minimum elongation and height standards than other visibility criteria, so they are considered more inclusive for the global calendar. However, some researchers believe that these criteria are more appropriate for mid-latitude regions and are not always consistent with conditions in tropical regions such as Southeast Asia (Syarif, 2019).

Indonesia has unique astronomical characteristics that affect the dynamics of crescent visibility. As a country located in the tropics, the position of the moon and sun tends to have a smaller angle of elongation at sunset, causing the crescent to often be thinner than in mid-latitude regions. As a result, visibility standards that are successful in other countries are not always relevant to be applied directly in Indonesia without adequate analysis (Maratus, 2022).

In addition to the geometric aspects of the moon and sun, Indonesia's weather conditions, which tend to be cloudy for most of the year, also affect the success of *rukyat*. This phenomenon often poses obstacles to the pure *rukyat* approach, while the *hisab* approach requires minimum parameters that are adjusted to the empirical reality of the crescent moon in tropical regions (Munir, 2024). Therefore, any proposed international criteria must be evaluated based on local Indonesian observation data to determine the feasibility of its application.

With international efforts to unify the Islamic calendar through the 2016 Turkish Criteria, it is important to understand how these criteria interact with the astronomical and jurisprudential (*fiqhiyah*) realities in Indonesia. If these criteria are adopted, the pattern of determining the beginning of the month in Indonesia has the potential to change significantly, including the possibility of differences with the MABIMS criteria or the traditional *rukyat* method still used by the Indonesian Ministry of Religious Affairs. These changes would undoubtedly impact the national calendar, the performance of religious rituals, and the social lives of Muslims.

Therefore, an analysis of the relevance of the 2016 Turkish Criteria (Istanbul Criteria) for Indonesia is very important. This evaluation is necessary not only from an astronomical perspective, but also from a *Sharia*, methodological, and practical perspective. Through in-depth study, it is hoped that it will be possible to determine whether these criteria can be effectively applied in Indonesia or require certain adjustments, thereby producing a more stable, accurate, and beneficial lunar calendar system for Muslims in Indonesia.

2. Literature Review

Description of the 2016 Turkish Criteria

The 2016 Turkish Criteria is one of the systems for determining the beginning of the lunar month that was developed to provide a global standard for the *Hijri* calendar. These criteria were designed to overcome the diversity of *hisab* and *rukyat* methods between countries, while promoting a calendar that can be applied internationally. In the context of this study, the 2016 Turkish Criteria are used as an object of analysis to examine their potential relevance for Indonesia, particularly in determining the beginning of the month, which has traditionally involved a combination of *hisab* and *rukyat*.

These criteria were developed during a series of meetings between astronomers and Islamic scholars held in Istanbul in 2016. The international forum brought together various astronomical institutions, astronomical scholars, and representatives of calendar institutions from a number of countries. The outcome of the meeting resulted in the formulation of the Istanbul Criteria as a new and more uniform standard based on modern astronomy. Its comprehensive and global nature makes it an alternative reference for countries seeking to unify the *Hijri* calendar (International Union of Muslim Scholar, 2016; Maskufa, 2018).

In its history, the 2016 Turkish Criteria had a major objective, namely the compilation of an international *Hijri* calendar based purely on calculations without relying on local sighting reports. This was triggered by the fact that differences in *rukyat* results often caused discrepancies in the start of the month, especially in large geographical areas. Thus, the Istanbul Criteria offers a unification mechanism that is considered more stable and predictable well in advance.

The basic principle of the 2016 Turkish Criteria is the concept of *global crescent visibility*, which states that the beginning of the month is determined when the crescent moon is theoretically visible in any region of the world, without taking into account the local astronomical boundaries of a country. This concept differs from the traditional *rukyat* approach, which prioritizes the visibility of the crescent moon from a local location. With global visibility, the calendar can be standardized internationally (Budiwati, 2025).

The principle of *pure hisab* in the 2016 Turkish Criteria is intended to ensure data consistency and reduce the subjectivity of *rukyat* reports, which are often a source of disagreement. *Hisab* is used as the sole basis for determining the beginning of the month, so that astronomical data such as elongation, crescent height, moon age, and azimuth difference become the main parameters in determining the start of the new month.

The first key parameter used in the Turkish Criteria is a minimum elongation of 8°, which in certain months can be increased to 11° to ensure the possibility of crescent visibility. Elongation is considered the most decisive factor because the greater the angular distance between the moon and the sun, the greater the chance that the crescent will be visible. With 8° set as the minimum threshold, this criterion tends to be stricter than in many countries.

Another important parameter is a minimum crescent height of 5° above the horizon after sunset. This height is based on international crescent visibility statistics, which show that new crescents are rarely visible when below 5°. Therefore, 5° was chosen as a realistic astronomical limit consistent with global observations.

In addition to elongation and crescent height, the Istanbul Criteria stipulate a minimum age of 30 minutes after conjunction (*ijtimak*) as an additional requirement to ensure that the crescent has sufficient illumination to be observable. The age of the moon is an indicator of the lunar phase that affects the level of illumination, and is therefore taken into account in these criteria (Anwar, 2016).

One of the most distinctive features of the 2016 Turkish Criteria is the absence of local criteria. This system does not require observation from a specific region, but rather relies on theoretical visibility anywhere in the world. Thus, when the crescent moon can be seen in one global location, all countries are assumed to enter the new month simultaneously. This approach aims to create a truly global international calendar.

From an astronomical perspective, the 2016 Turkish Criteria have strong rationality because they use parameters that can all be calculated with precision. Modern astronomical data allows for highly accurate predictions of crescent visibility, so the use of numerical parameters such as elongation and crescent height minimizes the possibility of differences in determination between countries. This makes the criteria very stable for long-term calendar purposes.

However, the application of the principle of global visibility can pose challenges for countries such as Indonesia, which still combine *hisab* and *rukyat*. Reliance on global data can result in a different start of the month from the results of local *rukyat*, especially when the crescent moon is not yet visible in Indonesia but is theoretically visible in other regions such as South America or West Africa.

From the results of analyzing Indonesian crescent calculation data in recent years, it was found that many crescent conditions in Indonesia did not meet the minimum Turkish Criteria, even though they met the MABIMS criteria. This shows a gap between local standards and Istanbul Criteria standards, which could potentially cause significant differences in determining the beginning of the month if the Turkish criteria were applied.

Furthermore, criteria with high parameters of 5° and elongation of 8° can also shift the pattern of determining the beginning of the month in Indonesia. In some cases, the new moon will begin later than the government's decision because the crescent moon does not meet the minimum threshold of the Turkish Criteria. Conversely, under certain conditions, the Turkish calendar may be earlier if global visibility is met outside the territory of Indonesia (Djamaluddin, 2025).

A normative *Sharia* review shows that the global visibility approach has a debatable *fiqh* basis. Some scholars accept the concept of *ittihadul mathali'* (global uniformity of the beginning of the month), while others emphasize *ikhtilaf al-mathali'* (differences in the moonrise between regions). Thus, the relevance of the Turkish Criteria for Indonesia needs to consider the more dominant local *fiqh* aspects of the *rukyat* approach.

Overall, the results of the study show that the 2016 Turkish Criteria have strong astronomical rationality and great potential for establishing a uniform global calendar. However,

its application in Indonesia poses challenges from both the local astronomy and *fiqh* perspectives. Therefore, further evaluation, dialogue between astronomical institutions, and methodological harmonization are needed before considering the adoption of these criteria in the Indonesian calendar system.

Astronomical Analysis for Indonesia

An evaluation of the crescent moon in Indonesia based on *rukyat* data from the last 10–20 years shows that most successful *rukyat* occur when the crescent moon is at a minimum height of 2–4° and an elongation of around 6–8°. A recapitulation of *rukyat* reports from various observatories such as Pelabuhan Ratu, Bukit Condrodipo, and Jepara shows that the crescent moon is often successfully sighted at parameters lower than the Istanbul Criteria threshold. This finding confirms the existence of specific characteristics of tropical regions that allow for the visibility of the crescent moon at relatively low positions (Djamaluddin, 2025).

From the compilation of this data, it appears that if the minimum limits of the 2016 Turkish Criteria (height of 5° and elongation of 8°) are used, then most of the successful *rukyat* in Indonesia in the last two decades would not be categorized as visible. In other words, many cases of *rukyat* that are valid according to government and MABIMS criteria do not meet the Istanbul Criteria standards. This serves as an initial indication of a discrepancy between the global parameters of Turkey and the reality of crescent moon observations in tropical regions.

A more detailed comparison shows that the crescent moon in Indonesia meets the Turkish parameters only during a small portion of the beginning of the month, especially when the conjunction occurs in the morning or afternoon and the moon is high enough at sunset (*maghrib*). This situation is more common in the middle of the year, when the ecliptic is in a more favorable position. Conversely, in other months especially when the conjunction occurs close to sunset (*maghrib*) the crescent moon almost always falls below the Turkish Criteria parameters.

This non-compliance becomes even more apparent when examined in critical months, such as *Ramadan*, *Shawwal*, and *Zulhijjah*. These three months often record low crescent positions due to the sun-moon motion pattern relative to the ecliptic line. Data from the last 15 years show that the beginning of *Ramadan* and *Shawwal* often experience young crescent conditions with an elongation of 5–7°, which does not meet the Turkish standard, although it is often sufficient for Indonesia to determine based on the *imkan rukyat* MABIMS (Djamaluddin, 2025; Nursodik, 2018).

Analysis of the suitability of the Turkish Criteria for elongation-start visibility standards with the Indonesian tropical crescent pattern shows that tropical regions tend to have more "favorable" crescent geometry even at low elongation. The relatively stable ecliptic inclination around the equator means that the moon remains visible at lower parameters. This is in contrast to high latitude regions, which require greater elongation.

Thus, the minimum threshold of elongation of 8° and height of 5° in the Istanbul Criteria is considered too strict if imposed on Indonesia. Empirically, the Indonesian crescent is often already visible at lower positions through factual observations, which have been verified by various observatory reports. This discrepancy indicates that these global criteria are not yet fully compatible with Indonesia's astronomical characteristics.

Based on the overall analysis, it can be concluded that the relevance of the 2016 Turkish Criteria for Indonesia is still limited. These criteria have strong astronomical rationality at the global level, but are not always in line with the reality of tropical crescent visibility. Therefore, if applied directly, the Istanbul Criteria could trigger significant differences in the determination of the start of the lunar month in Indonesia, especially during the months of worship. This opens up room for further discussion on the adaptation, modification, or harmonization of criteria to better suit regional conditions in Indonesia.

Normative Analysis of *Sharia* Law

In classical *fiqh*, the position of *hisab* and *rukyat* has been a topic of lengthy debate. The majority of scholars place *rukyat* as the primary method for determining the beginning of the lunar month based on the Prophet's hadith which commands *ṣūmū li-ru'yatihi wa afṭirū li-ru'yatihi*. However, some other scholars, especially from the *Malikiyah* and some *Shafi'iyah* circles, accept *hisab* as a supporting factor or even a basis in certain conditions. These differences in opinion show that *fiqh* has flexibility in responding to developments in astronomy (Nasoha, 2025).

With the development of astronomical technology, some contemporary scholars have begun to recognize the role of *hisab* as an instrument that can provide certainty in determining the beginning of the month. In Indonesia, *hisab* is mostly considered *mu'tabar* (to be taken into consideration) but has not replaced the role of *rukyat* as verification. This can be seen in

the government's practice of determining the beginning of the month (*itsbat*), which still requires *rukyat* reports even though *hisab* parameters are used as visibility limits.

A comparison between the *rukyat-based itsbat* system and *global hisab* shows a fundamental difference in *fiqh* approaches. The Indonesian system places *rukyat* as a symbol of obedience to the text, while the Istanbul Criteria uses pure *hisab* as a mechanism for calendar certainty. In the view of some modern scholars, *hisab* can replace *rukyat* because both are tools for determining the presence of the crescent moon; however, for scholars who adhere to the literal meaning of the text, *rukyat* remains irreplaceable.

The use of global *hisab* as adopted by the 2016 Turkish Criteria has sparked significant *fiqh* debate. Its supporters argue that *Sharia* does not require physical sighting, but demands certainty of the new moon's arrival, which can be determined through modern astronomical *hisab*. Meanwhile, opponents emphasize that *rukyat* has its own value as an act of worship and is a form of *ta'abbudi* that cannot be simply abandoned.

The pros and cons of using pure *hisab* are also related to questions about *maqāṣid al-syarī'ah*. Supporters of pure *hisab* argue that the certainty, regularity, and uniformity of the calendar are part of the interests of the global Muslim community. Meanwhile, groups that prioritize *rukyat* argue that interests should not override the textual provisions of *Sharia*. It is this difference in orientation towards maqasid that has caused the debate between calculation and *rukyat* to continue to this day.

In the Indonesian context, acceptance of pure *hisab* is still limited. The majority of Islamic organizations follow the *rukyat* approach as the primary method. Even when *hisab* is used in determining the *imkan rukyat* MABIMS, the position of *rukyat* remains unchallenged (Putra, 2024). This shows that Indonesian *fiqh* culture has a tendency to combine a textual approach with a rational one, while still favoring *rukyat* as legal legitimacy.

The concept of *ittihadul mathali'* (global uniformity of the crescent moon sighting location) adopted by the 2016 Turkish Criteria contradicts common practice in Indonesia. Indonesia traditionally follows the concept of *ikhtilaf al-mathali'*, which states that differences in the crescent moon sighting locations result in differences in the start of the month between regions. This approach is supported by the majority of *Shafi'i* scholars and forms the historical basis for the practice of *rukyat* in the Indonesian archipelago (*Nusantara*) (Ulinnuha, 2021).

From a *Sharia* perspective, *ittihadul mathali'* is based on the opinion of some scholars who believe that one *rukyat* can be applied to the whole world. However, this approach has the consequence that regions with different astronomical conditions will follow the results of *rukyat* or *hisab* in other places, which is considered inconsistent with the geographical reality and *qarinah 'urf* of Indonesia. Therefore, the acceptance of this concept remains a complex issue.

Normative studies show that Indonesia's practice of combining *hisab* as a determinant of *imkan rukyat* and *rukyat* as verification has a strong *fiqh* basis and is agreed upon by the majority of scholars. Meanwhile, the use of purely global *hisab* such as the Istanbul Criteria falls into the category of minority opinions that have developed in the modern era. Therefore, the application of the Turkish Criteria in Indonesia requires a more solid *fiqhiyah* basis and dialogue across religious authorities.

Based on the overall analysis, it can be concluded that the 2016 Turkish Criteria are valid in terms of *fiqh* for countries or communities that adhere to the pure *hisab* view. However, in the context of Indonesia, which still prioritizes *rukyat* and follows the concept of *ikhtilaf al-mathali'*, these criteria are not yet fully relevant. Reconciliation between modern astronomical approaches and local jurisprudential (*fiqh*) principles is needed in order to achieve harmonization of the Islamic calendar system without neglecting prevailing legal traditions.

3. Research Method

This study uses a qualitative-descriptive approach combined with astronomical comparative analysis to examine the relevance of the 2016 Turkish Criteria in the Indonesian context. The research data sources include official documents on the 2016 Istanbul Criteria, *rukyat* data from various regions in Indonesia, reports from observatories and national *hisab rukyat* institutions, MABIMS publications, as well as scientific articles and astronomy journals related to crescent visibility. All data were collected through in-depth literature studies, archival searches, and compilations of *hisab* results previously used by the government and Islamic organizations in determining the start of the lunar month (Moleong, 2018; Sugiyono, 2018).

The analysis techniques used include parametric crescent analysis based on moon height, elongation, moon age, and azimuth difference at sunset. Indonesian crescent calculation data is systematically compared with the minimum limits set in the Istanbul Criteria (height of 5° and elongation of 8°) to determine the level of conformity or potential conflict in the results. In addition, the study also uses normative *Sharia* studies through a review of *fiqh falak* literature related to the *Sharia* basis for determining the beginning of the month, in order to assess

the suitability of the Turkish Criteria from an Islamic law perspective. This multidisciplinary approach allows for a more comprehensive analysis of the astronomical and jurisprudential (*fiqh*) implications of adopting the 2016 Turkish Criteria in Indonesia.

4. Results and Discussion

Analysis of the Calendar System in Indonesia

Practical Implications

The application of the 2016 Turkish Criteria has the potential to bring significant changes to the determination of the start of the lunar month, particularly for 1 *Ramadan*, 1 *Shawwal*, and 1 *Zulhijjah*. The elongation parameter of 8° and the minimum crescent height of 5° provide higher limits than the MABIMS criteria. As a result, several months that have been determined through *rukyat* with marginal crescent results may no longer meet Turkish standards, so that the beginning of the month may be shifted one day later. On the other hand, under certain conditions, due to its global nature, the Turkish Criteria can accelerate the beginning of the month if the crescent already meets the requirements in other regions.

Compared to MABIMS, the application of the 2016 Turkish Criteria has the potential to produce a more astronomically consistent start of the month, but with the consequence that Indonesia which is located in the tropics and often experiences a low crescent moon often only meets the parameters on the following day. Thus, there is a possibility that the start of *Ramadan* or *Shawwal* may fall one day later than the current Indonesian government's determination. This phenomenon of difference will mainly occur in months where the crescent moon is in the critical zone (critical months) (Djamaluddin, 2025b).

If applied on a national scale, the Indonesian government's official calendar could potentially undergo a comprehensive revision. Calendars used by mass organizations such as Muhammadiyah, which use *hisab wujudul hilal*, are likely to differ more often from the results of the Turkish Criteria, which are based on global visibility. Meanwhile, calendars that refer to MABIMS including the NU and government calendars will shift to a new and more restrictive standard. This change requires a readjustment of the entire annual calendar cycle, especially national holidays related to *Ramadan* and *Eid al-Fitr*.

In addition to date changes, the application of the Istanbul Criteria will affect long-term crescent prediction patterns. The Turkish Criteria are more stable and can be used to create consistent multi-year calendars, allowing the government to have a precise *Hijri* calendar reference for administrative purposes. However, this stability must be balanced with public acceptance, given that Indonesians are accustomed to the variability of *rukyat* and *itsbat* provisions.

In practice, the possibility of acceleration or delay at the beginning of the month with the Turkish Criteria is quite large. In the case of a low crescent in Indonesia, the beginning of the month tends to be one day behind the MABIMS criteria. Conversely, if other countries have met the visibility standards on the previous day, the Indonesian calendar can actually be moved forward. This shows that the global visibility mechanism, which is the main characteristic of the Istanbul Criteria, has the potential to change the orientation of the Indonesian calendar from being locally based to globally based.

Institutional Implications

The possibility of the Ministry of Religious Affairs adopting the 2016 Turkish Criteria depends on two aspects: astronomical suitability and jurisprudential (*fiqh*) suitability. Although these criteria have a strong astronomical basis, their application must take into account the legal structure and tradition of *itsbat* determination, which combines *hisab* and *rukyat*. Changing the criteria requires in-depth study and legitimization from the *National Hisab Rukyat Council*, so direct adoption without a transition phase seems difficult to implement. The response of large organizations such as NU, which combine *rukyat* and *hisab imkan ar-rukyat*, will consider the aspect of *rukyat* testimony, which is a characteristic of the method of determining the beginning of the month in their tradition. With higher criteria, the chances of the crescent being visible to the naked eye will decrease, so NU may still be cautious (Millah, n.d.).

Astronomical observatories and national *rukyat* institutions play an important role in empirically testing the Turkish Criteria in Indonesia. *Rukyat* data collected over several decades has been used as a reference in assessing whether the height standards of 5° and elongation of 8° are relevant to Indonesia's atmospheric and astronomical conditions. Thus, institutions such as Indonesia's Meteorology, Climatology, and Geophysics Agency (BMKG), National Research and Innovation Agency (LAPAN/BRIN), and Islamic boarding school observatories have made strategic contributions in collecting field data to assess the feasibility of adopting these criteria.

From a policy perspective, the application of the Turkish Criteria at the national level requires harmonization between mass organizations, the government, and astronomical experts. The national *Hijri* calendar policy cannot depend on a single criterion without a

minimum consensus. Therefore, intensive dialogue between astronomical institutions is a key requirement. Otherwise, the potential for date differences will increase, especially in important months such as *Ramadan* and *Eid al-Fitr*.

Meanwhile, local *rukyat* institutions also need to understand that changes in criteria will have an impact on observation procedures. With higher criteria, the chances of successful *rukyat* decrease, so observatories need to update their equipment, observation methods, and technical training. This requires long-term investment to strengthen the national astronomy infrastructure.

Social and Religious Implications

The application of the 2016 Turkish Criteria has the potential to improve the consistency of the *Hijri* calendar internationally. With the concept of global visibility, Muslims around the world can use the same calendar for the beginning of the month. However, in Indonesia, this consistency may conflict with the customs of the people, who have been following the results of itsbat meetings based on local visibility (Djamaluddin, 2024).

In the context of public welfare, uniformity of dates is considered ideal, but not absolutely mandatory if it causes social unrest. If the Turkish Criteria are applied without dialogue and socialization, the differences between the government and mass organizations could actually widen. This situation could cause public confusion regarding fasting dates and holidays, so the aspect of *maslahah* must be the basis for every decision.

If there is a difference between the government and mass organization calendars, the community has the potential to be divided in its worship practices. For example, some may follow the results of the national *rukyat*, while others may follow the global calendar based on the Istanbul Criteria. Differences like this are not merely astronomical technicalities, but have an impact on social cohesion and the religious routines of the community.

On the other hand, the integration of an international calendar based on the Turkish Criteria could be a step forward in global Islamic calendar diplomacy. Indonesia, as the country with the largest Muslim population, is strategically positioned to play a role. However, this integration can only be achieved through a framework of inter-country cooperation, not through unilateral adoption.

Finally, the implementation of the 2016 Turkish Criteria requires a comprehensive approach that takes into account astronomical, fiqhiyah, social, and institutional aspects. The decision to adopt or not must consider its suitability with the characteristics of the Indonesian crescent moon, the capabilities of astronomical institutions, the readiness of the community, and the goal of maintaining unity among the people. Thus, the relevance of the Turkish Criteria in Indonesia ultimately depends on the extent to which it can strengthen the calendar system without sacrificing the social and religious harmony of society.

5. Conclusion

This study shows that the 2016 Turkish Criteria have a strong astronomical basis through the parameters of a minimum elongation of 8°, a crescent height of 5°, and a *post-ijtima'* moon age that is consistent with global visibility patterns. From a *Sharia* perspective, the use of pure *hisab* as an instrument for determining the beginning of the month still requires comprehensive jurisprudential (*fiqh*) justification, given that the tradition of *rukyat* continues to hold an important position in classical literature. The main findings indicate that astronomically, these criteria are capable of improving calendar predictability, but normatively, they require adaptation and *inter-mazhab* dialogue to ensure their compatibility with religious practices in Indonesia.

In the Indonesian context, the 2016 Turkish Criteria occupy a position as a progressive international alternative standard but are not yet fully compatible with the MABIMS approach or the *rukyat-hisab* method used by the government and large mass organizations. Indonesia's tropical crescent pattern, which is often at the limit of visibility, means that the Turkish Criteria tend to result in a shift in the beginning of the month compared to the national standard. Furthermore, its implementation has the potential to trigger new differences between the government, NU, and Muhammadiyah if it is not accompanied by a joint methodological agreement. Therefore, its current position is more appropriately placed as a comparative reference and enrichment material, rather than as the main criterion.

As a recommendation, harmonization of the *Hijri* calendar in Indonesia can be achieved through three steps: first, strengthening astronomical and jurisprudential (*fiqh*) studies on the applicability of Turkish Criteria locally, including empirical testing based on national *rukyat* data. Second, expanding dialogue between the government, Islamic organizations, and astronomical observatories to build a stronger consensus on criteria. Third, consider an integrative model, namely maintaining the MABIMS *rukyat* mechanism while adopting global predictive elements as additional references. With this collaborative approach, the Indonesian *Hijri* calendar can develop more accurately without sacrificing social stability and community unity.

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