

## **Ismaili Lunar Calendar: An ideal base to unite the Ummah**

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*The purpose of the following dialogue is to promote tolerance and intellectual understanding among the Muslim community of the global village. The Modern World humiliates the Muslims with the fact that while astronauts have landed the Moon, and other scientists are busy in discoveries of the universe, majority of the Muslims are still following the directions of the clergy, regarding the sighting of the Moon, instead of following the scientific course, upon which religion of Islam is based.*

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### **1. Origin of the Lunar Calendar:**

Base of the 'Ismaili Lunar Calendar' is Qur'an:

**"The Sun and the Moon follow exactly computed courses." [1]**

*This Ayah lays the foundation on which it is permissible to calculate the emergence of new crescent from a Shariah standpoint, and refutes any claim raised by people of limited-understanding who believe that crescent sighting should be followed; because all such erroneous sightings would contradict the findings of this Ayah and at the same time contradict the 'words of Qur'an', explaining the orderly movement of the Moon and other celestial bodies. The precise laws, made by Allah, governing the Universe, bear witness to Hikmah ilahiyyah and Adal and also of His favours to His creatures.*

*It was Bani Fatemah who realized the need of the Lunar Calendar, and they introduced it to the world at large, as soon as they established their vast Empire, even spreading across Europe. This Lunar Calendar remained in practice officially for more than 225 years, in North Africa and across the Atlantic Ocean. The same calendar is in practice officially by the Ismaili Nizaries & Musta'alavis (Dawoodi, Sulaiymani, & Alavi). The notable powerful dynasty of the Sumrahs of Sindh (Pakistan) followed the Lunar Calendar from 365(A.H) to 974(A.H) for more than 609 years, and without any alteration. As elites of Sindh, the Sumrahs handled the affairs of Al Dawah al Hadiyah as Aa'mil of the Ismaili Fatemi Imams in Sindh, whose jurisdiction extended up to the 'Attock Fort'. Their relationship continued to remain under the command of Al Dai al Mutlaq, one after the other, during the period of Satar. The Ismailis calculate their months according to this Lunar Calendar and least bother (scarcely depend) on the sighting of the Moon for starting a New Year or a New Month, as they have carried out an accurate scientific research on the movements of the Moon. They have a very rich and valuable literature on the subject of 'Lunar Calendar', the glorious origin of which goes to Amir al Muminin, Ali ibn Abi Talib through the references of Abi Abdillah Imam Jafar Assadiq. An authentic scientific chart of 'Qaran-e-Saghir' and 'Qaran-e-Kabir' is attributed to Ali. [2]*

## **2. Calculation of the Lunar Cycle:**

*On an average, a lunar month (or lunation) comprises 29 days 12.73 hours, but it can sometimes be as short as 29 days 6½ hours, or as long as 29 days 20 hours. Fluctuations in length are cyclic. There is a fast cycle averaging about 412 days (which is just under 14 lunar months); which is associated with changes in the eccentricity, or shape of the lunar orbit. This rapid cycle is modified by a slower one whose mean wavelength is 8.85 years (equal to one complete revolution of the axis of the Moon's elliptical orbit). In addition, there are other oscillations, some causing variations extending over many hundreds of years – when it may not even make sense to look for an average wavelength. Other factors too contribute to the Moon's complex behavior.*

*For instance, a longer than normal lunation tends to occur between October and March because of the faster movement by the Earth in its orbit round the sun. In February and March, this delays the instant when the Moon appears to overtake the sun. Also, the sun lies closer to a newborn crescent than it would if the Earth's speed was uniform - thus postponing the onset of New Moon visibility. In October and November, on the other hand, the sun's position on the ecliptic line is "behind schedule" - so the Moon overtakes it earlier. Occasionally, four consecutive lunation will span more than 119 days. Under these circumstances, it is possible to have four successive 30-day months. When that happens, the Moon only just becomes visible at the beginning of the first month in the sequence, and just fails to do so on the 29<sup>th</sup> of the 4<sup>th</sup> month. A predetermined calendar would certainly make it easier to plan events. Unfortunately, it is not always possible to predict that a newborn crescent will definitely be visible or invisible from a given location, because of the wide grey area separating the two categories. This uncertainty is caused by day to day fluctuations in atmospheric water vapor and dust content.*

## **3. A Few Logical Examples:**

*The Ismailis follow a pre-calculated calendar based on a cycle of 30 Muslim years (eleven of which contain 355 days instead of the more common 354—thus totaling 10631 days). The accumulated error in that calendar is about one hour per century. This, together with the cyclic variations in the behavior of the lunar orbit, can bring the Ismaili dates two (or on rare occasions even three) days earlier than those governed strictly by Crescent visibility. In 1412 (A.H), for example, Ismailis Ramazan commenced on the morning of 4<sup>th</sup> March 1992, whereas throughout much of India and the Far East, Sawm did not start till 7<sup>th</sup> March. There are of course other ways in which a predetermined calendar might be constructed. Mathematical criteria could be laid down – and adopted, regardless of whether or not the crescent happens to be observed. Such guidelines might be based, for example, on the age of the New Moon at dusk (suitably defined), or the lag between sunset and moonset, or the number of degrees separating the sun and moon as they descend. It is then essential to specify either the exact time at which the criteria are to be applied—or the precise location; for example, Makkah would probably be universally acceptable. [3]*

Qur'an says:

*“Allah enlighten the sun and effulgent moon and created stations for the moon's movement so*

*that you can keep the counting and records of years". [4]*

*The Circulation of the Moon around the Earth is described in the Qur'an, and on the basis of it the Lunar Calendar was designed. The 19<sup>th</sup> Al Dai al Fatemi, Syedna Idris Imaduddin(d.872/1468, Shib'am, Yemen) discussed the issue and proved that the Moon circulates one time around earth in 29 ½ days and some minutes, and a single circulation is counted as one month. According to calculations, in the Lunar Calendar, a 30 days month is considered complete, and a 29 days month is called incomplete. The first month of Muharram is of 30 days and the second month is of 29 days, so according to this, the last month of Zilhajjah will be of 29 days. At the end of 12 months, some fraction is left between the movement of the Moon and 12 months, and as per calculation 11 leap-years are set in every 30 years in the lunar calendar. That means a leap-year will have 30 days instead of 29 days in the last month, which is Zilhajjah. [5]*

#### **4. Shia Ismaili Point of view:**

*Shia Ismailies argue that Rasulallah (S) always observed Siy'am by particular calculations and commanded the Ummah to do accordingly. A valuable reference of Maaz bin Kasir is available in "Majm'a al Bahraiyn" which has been transmitted by Huzaifah bin Mansur who asked Abi Abdullah Imam Jafar Assadiq that people say: Rasulallah(S) observed some months of Ramazan for 29 days and some for 30 days. Imam Jafar Assadiq spontaneously rejected this allegation and replied:*

*"These people are telling lies; Rasulallah(S) has always observed 30 days Siy'aam in the month of Ramazan. From the day Allah created the Sky and the Earth, Ramazan has never ended in 29 Naqis (incomplete) days". [6]*

*As Muslims of the early era were not familiar with calculations at that time, the day on which everyone observed Sawm, and celebrated Eid, used to be announced. Once when Rasulallah(S) was leaving Madinah for expedition of 'Ghazwah Hunain', people behind him questioned, "We observed Sawm of Ramazan with you, and celebrated Eid with you, as you are leaving, how should we observe it?" Rasulallah(S) guided as follow:*

*"Observe Sawm of Ramazan by watching Him and celebrate your Eid by watching Him too." [7]*

*Children of the Ismaili Dawah argue that the meaning behind the word of Hadith "Ley Ruyate Hee" was Ali, as Rasulallah (S) had appointed him 'Wali al Amar' on his seat, in his place. Similarly, there is no doubt that Rasulallah(S) is the Sun of Nubuawah while Ali is the Moon of Imamah. Pointing out this divine reality, Syedna al Moayyid al Shirazi (d.470/1078, Qahera, Egypt) says in a verse, available in his "Diw'aan" as follow:*

*"Wa Ya Qamaran B'aada Zakas Siraji;  
Muniran Bada Lid'diyaji Mubira" [8]*

*(O Moon which appears after the Sun; in order to remove darkness)*

*Syedna Hamiduddin al Kirmani (d. in between 411-427 A.H.), maintained that Allah has created everything in pairs, so no one could share and compete with Him. Qur'an says:*

*"He is sacred who created everything in pairs." [9]*

*In another Ayah this matter is clarified as follow:*

*“We have created everything in pairs. May you remember” [10]*

The learned writer of *“Al Risalah al Lazimah”*, Syedna Hamiduddin al Kirmani says:

It is fact that we also find pairs in everything for e.g. diamond and gems, dryness and swamp, high lands and tropical area, similarly day and night, good and bad deeds, body and soul, emergence and disappearance, Duniya and Akhirah, male and female etc, chain is very long. Similarly Rasulallah (S) has raised Shariah on the basis of pairs, for e.g. Sal’aat & Zak’aat, Siy’aam & Haj, Az’aan & Iqamah, Haj & Umrah, Safa & Marwa, Farz & Sunnah, Ruku & Sujud etc. In this manner there are two types of observation, which are adjoining with each other, physical and spiritual. Physical observation is linked with eyes that can observe colours and geometrical figures; on the other hand a spiritual observation is linked with the mind and soul which can attain and observe those things, which physically is not possible. Attainment of these objects is beyond the physical power. Qur’an says:

*“Thus heart did not lie whatever it saw and.....O’ Mohammad! Did not you observe your Creator that how He enlarged the shade (of sky)” [11]*

And Qur’an says:

*“(O’ Mohammad!) Did not you see what your Creator did with ‘Ash’aab al Feel’?” [12]*

Rather we know that Rasulallah (S) was not present in the period of ‘Ash’aab al Feel’, that he would see them. So, the meaning of observation is linked with ilm and Marifah. For example we say that someone is blind by heart, which means he is short- sighted and incapable to understand. [13]

It is the opinion of the people, who follow Qiyas that sometimes the month of Ramazan, is perfect and sometimes imperfect. They believed that the Siyam of Ramazan is based on the sighting of moon. These people refer to the following Hadith as evidence:

*“People should observe Siy’am and celebrate their Eid by observing him. If clouds appear, then observe Siy’am for thirty days.” [14]*

This Hadith is Zaif and non authentic. We will describe with irrefutable arguments that the month of Ramazan is always perfect and is not imperfect in any circumstances. First of all, we categorically deny and refute the argument of any person who says that, “observe Ramazan and celebrate Eid by watching (Moon) him”. We would like to guide that person and explain the meaning. When Rasulallah (S) decided to join the expedition, prior to the month of Ramazan, some of his Ash’ab approached him and asked, “O Rasulallah (S) we did our Siy’am by observing you and similarly celebrated Eid by watching you, so what should we do in your absence. Rasulallah (S) directed as follow:

*“Observe Siy’am and celebrate your Eid by observing him”. [15]*

Syedna al Moayyid al Shirazi explained this Hadith in Majlis 42 of *“Al Majalis al Moayyidiyah”* as follows:

Thus the root origin of this Hadith explains that it was obligatory to observe the Siyam by the Siy’am of Rasulallah (S) in his presence. Similarly it becomes obligatory to do so with his successor too, in his absence. Thus this law attains permanency in other cases too when Rasul is absent or Imam is present, just as the Ash’ab declared that we observed Siy’am by you.

Argument in favor of beginning of the month by sighting the Moon by one of the major wing is totally non acceptable on both bases, religious as well as logical. One of the reasons is that Rasulallah (S) always said that Jibrael regularly came and informed each and everything in the morning or evening. So the one, to whom in the morning and evening, the news of heavens was disclosed, did not have the need to search for the Moon in the sky. If Rasulallah (S) came out in search of the Moon, it is a self contradiction of his own declaration of Wahi, allowing the opponents of Wahi who may raise the question; O Rasulallah (S)! Why did not you ask about the Moon from Jibrael, so that you may be saved from this problem?

The second reason is the following Hadith, which has been recorded in several books as follow: [16]

*“Ana Be’turuq’aatis Sam’aae Aarafu Minkum Be ‘turuq’aatil Ard”-“I am more aware of the celestial courses than you are aware of the ways of earth”.*

After this Hadith is it logical to assume that Rasulallah (S) would look out for the emergence of the Moon after every 29 days, when an ordinary astrologer is well aware of this fact? It is also a fact that the condition of the earth is different, at different places. At some places the height of the land is so much high i.e.: in mountainous regions where sighting of the Moon becomes easy, while elsewhere it is so much low that the appearance of moon takes time. It is a fact that nothing was hidden from the knowledge of Rasulallah (S). If any knowledge was hidden from Rasulallah (S) than Nubuwah would have been incomplete. It is a universal fact that Rasulallah(S) was free from all faults and defaults. After knowing the difference of opinion, we become sure about the fact that our intellects follow only one aspect, and ignore the logic, reasoning, and even the divine realities of Nubuwah. Why Siy’am was declared Farz and linked with Haj? It is common that the Moon is visible at some places and not visible at some other place. It is also incorrect and unacceptable, that there should be a day in the month of Shab’an in which the Moon does not appear. This is such an authentic argument that an intellectual just cannot ignore it, except an irrational mind. Similarly Qur’an says:

*“So, Siy’am has been made Farz upon you similarly as it was Farz before you on others. May you become pious”.* [17]

The Qur’an points out towards the Christians, among whom Siy’am, is based not on sighting of Moon but on the basis of calculation. Afterwards, Qur’an has indicated a fixed period. It emphasizes that:

*“It is the counted days.”* [18]

(The readers are requested to please study the above Ayah carefully)

Thus the counted days are those which were surely calculated. Thus there is no need to search for the Moon while the days are calculated. If there is the slightest doubt left, that once the month of Ramazan would be of 29 days and once of 30 days, than Qur’an would never have mentioned the specific words: *“Calculated Period”*, with great emphasis. Thus the meaning of the *“Counted Period”* is the perfect counted time. It means it is an equivalent of the statement



of the one who has mentioned that this one is counted, and this one is weighed in gold. Another argument is that if the base of a year is on six complete and six incomplete months, so it is compulsory that the base of year should be perfect without any lacuna. The first month Muharram should be perfect and Safar should be imperfect, Rabi al Awwal should be perfect while Rabi al Aakhir should be incomplete, Jamadil Awwal should be perfect while Jamadil Aakhir should be imperfect, Rajab and Ramazan should be perfect. Therefore, the famous Hadith:

*“Shab’an will never be perfect and Ramazan will never be imperfect”.* [19]

On the imperfectness of Shab’an “Lailat an Nisf” -15<sup>th</sup> night is enough evidence, other than Rajab and Ramazan. The Night of 15<sup>th</sup> Shab’an has a different position, because it has 14 nights in the beginning, and 14 nights after it is counted. This law is not applicable to the month of Ramazan, because if the 15<sup>th</sup> night of Ramazan is declared as half of the month, then it is not correct, because 16 days remain in the month. If the 16<sup>th</sup> night of Ramazan is declared half of the month then also it is not correct because 16 is not the half of 30.

Kafarat of the Ramazan is also evidence. The one who does not observe Siy’am, without legal excuse, than he/she must observed Siy’am of 2 months. This is the Kafarat of that sin. It is also the double of the days of Ramazan, which are 60 in numbers.

If one is also not eligible to perform this then he/she must arrange food for 60 poor persons. If there was any slightest doubt in the counting of the days of Ramazan, ie: 29 days, then there must be provision available, that one must arrange food as Kafarat for 60 or 58 poor”. [20]

19<sup>th</sup> Al Dai al Fatemi, Syedna Idris Imaduddin has discussed in “*Mudhezat al Buht’aan*” as follow: [21]

“It is clear that Ahadith and sayings of the Ahl al Bait are not for ‘unbound people’, but it was for those who are not aware with the calculations. This was the practice of Imam Jafar Assadiq. The one who followed him followed Rasulullah (S). Qur’an has clarified that “So, Siy’am is Farz upon you similarly as it was Farz before you on others”.

Years and months can be calculated through the Kabisah calculation chart. According to the teaching of Imam Jafar Assadiq, ‘ABJAD ‘chart is used in Kabisah calculation. Account of “*Man La Yahzaruh ul Faqih*” confirms a Tradition of Imam Jafar Assadiq explaining Kabisah formation.[22] This chart was prepared according to the guidance of Qur’an and instructions of Ahl al Bait. Every student of Islam knows this Hadith:

*“I am leaving two everlasting precious things among you, one is Qur’an another is the Ahl al Bait”* [23]

The learned scholar of Ahl al Bait explains that we cannot separate both from each other nor can we follow Qiyas and Rai, which creates clouds of doubts. The discussion is very long but irrefutable. In this book a Hadith is quoted with the reference of one of the wives of Rasulullah(S), who said: “I never saw Rasulullah(S) that he ever observed an in-completed

month of Siy'aam of Ramazan and neither found him to observe Siy'aam in any month perfectly". [24]

### **5. Method of Kabisah Calculation:**

The calendar contains 12 months that are based on the Qur'an. [25]. Hijrah calendar is a purely lunar calendar. It depends on the Moon's cycle around the earth. That is how the Hijrah Calendars have been calculated and prepared. It has twelve lunar months. The average length of a lunar month is 29.53058 (solar) days. As per certain Hikmah, the Hijrah year will contain 29 or 30 days long months. Muharram starts with 30 days. The next month Safar has 29 days, so on so forth. That means the last month of the year Zilhajjah will have 29 days in a month. The total length of the Hijrah year is usually 354 days. There is a small fractional difference between the Moon's cycle around the earth in a year and the Hijrah calendar. To compensate for this difference, there are 11 Kabisah years in a cycle of 30 years. A Kabisah year is a year in which the month of Zilhajjah has 30 days instead of the usual 29 days.

According to the learned writer of "*Risalah al Bay'aan*", the following Nabavi instruction was issued at the time when Rasulullah(S) was leaving for an expedition and leaving the Muslim community:

*"Observe Sawm and celebrate Eid by watching him". [26]*

It contains a particular meaning (not related towards the sighting of moon) which has a significant importance. A person who was ignorant with the orders of Ramazan asked Rasulullah (S) that "we observed Siyam with you and celebrated Eid with you. Now that you are leaving so how should we observe Siyam? He answered:

*"Observe by watching him and celebrate by watching him". [27]*

The persons who asked this question were those who were considered to be simple men with true intentions. So, Rasulullah (S) instructed them emphatically to follow his Ahl al Bait". This matter has been clarified in detail in "*Da'aim al Islam*" of Syedna Qazi an Nauman (d.363/974 C.E. Qahera, Egypt). It is only for those, who are able to understand and solve the problem. Allah has fixed the Siyam of Ramazan obligatory. Qur'an says:

*"Ramazan is the month in which Qur'an was descended, with Hidayah for people, and which differentiates and clarifies between truth and obscurity. Whoever achieves this month, it is obligatory upon him to observe Siyam, if he is sick or in travel, so must complete it in other days. Allah likes an ease for you, not hardship". [28]*

### **6. Concluding Remarks:**

The period is of 30 days, neither more nor less. The Moon is entirely different in different places and periods. It is difficult to understand for those who have little information in this matter. The reason of difference in periods is early and late, the first period will be different from the second, and second from third, and in this way this matter is continuous till the end of the year. In this manner the differences in the Moon's width and height differ, from cities to cities. This dispute was created due to the distance of the Moon when it ascends towards the sky and also when it descends in to the skies. "The 'Uml Al Qura Calendar' used by Saudi Arabia who claim it to be for

civil purposes only, yet plays a major role in influencing the determination of the 29<sup>th</sup> day of the month in which the crescent is normally observed”[29].

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[30] My special thanks are due to my learned friend, Mazun al Dawah al Alaviyah, Al Syed Hatim Zakiyuddin, Baroda, India for reviewing the text

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