

Two Prophet Muhammad's Birthdays in 2015

(Lunar Calendar-v-Solar Calendar)

- 1) A number of our Muslim members have questioned in Fiji, how could it be that there were two Milad-un-Nabi¹ (Prophet Muhammad's Birthday) celebrations in the same year 2015?
- 2) The main cause is the comparison between the lunar calendar² and the solar calendar³. This has happened many times in the past and will always happen once in every 33 years.⁴
- 3) The cycle of 33 years is because of the superimposed overlap between the longer periods of solar (Gregorian or Christian)⁵ calendar over the slightly shorter lunar (or Muslim) calendar, only insofar as this matter is under discussion.
- 4) The longer solar based (Gregorian) calendar is 365 or 366 days depending whether or not it is regular year or leap year.
- 5) In simple terms, the 12 months of the Gregorian calendar is based on the orbital rotation of the assembly of the earth with the moon around it, orbiting around the sun. The sun is at the center of this planetary rotation in our universe.
- 6) Whereas the lunar calendar (or Muslim) is based on a cycle of 354.37 days and the new day begins at sunset (and not at midnight as in the Gregorian calendar).
- 7) The Muslim calendar commenced in year AD622, with the migration of Prophet Muhammad from Mecca to Medina and the event is also widely known as the Hijra.
- 8) As can be easily obvious from the differences in figures and based on different calculation logs, the lunar (or Muslim) calendar, because it is slightly shorter, advances by 10-11 days, depending whether or not leap year featured on the Gregorian calendar.
- 9) This event of the lunar (or Muslim) calendar advancing by 10-11 days does not become so significant, unless and until there is comparison made between the two calendar systems with a common event.
- 10) Hence, in the Gregorian calendar window of year 2015, the first Milad-un-Nabi (Prophet Muhammad's Birthday) celebration was 3rd January 2015 and the second event is 24th December 2015. This is so because of the sum of the first few days of the first Milad-un-Nabi (Prophet Muhammad's Birthday) celebration and the second

¹ First event: Milad-un-Nabi or Prophet Muhammad's Birthday is on 12th Day of Islamic month of Rabi-al-Awwal, the third month of the Muslim calendar system. In Fiji this is 3rd January 2015.

Second event: This is on 24th December 2015.

² Lunar calendar has 12 months, which alternate 30 days and 29.5 days, which comes to 354.37 days. A day has to be added in leap year and that comes to 355 days. Please read the Appendix for details.

³ The solar calendar also has 12 months with total of 365 days or 366 days for leap year. Please read the Appendix for details.

⁴ This cycle between the solar calendar and the lunar calendar will mathematically repeat every 33 years. Please read the Appendix for details.

⁵ The Gregorian calendar was started by Pope Gregory XIII in February 1582. Before that change, the Julian calendar was used. The Julian calendar was started by Julius Caesar. Please read the Appendix for details.

Milad-un-Nabi (Prophet Muhammad's Birthday) celebration comes to less than 11 days, at the two ends of the year 2015.

- 11) It is reiterated that this is not a regular event of celebrations of two Milad-un-Nabi (Prophet Muhammad's Birthday) in one Gregorian year but cyclical once in every 33 years.
- 12) The current Islamic (or Muslim) year 1437AH is from 14th October 2015 till 2nd October 2016.
- 13) Muslims in Fiji experience two "new year's celebrations." First is the official Fiji Government New Year public holiday on 1st January each year and the other is 1st Muharram every year, signifying the Muslim New Year.

Appendix to Footnotes

Footnote 2

In the Lunar calendar or Muslim calendar, months are based on the moon's orbit around the earth.

Footnote 3

Years are based on the earth's orbit around the sun. Days are based on the earth's rotation on its axis but the hours of daylight and hours of darkness will vary depending on a particular geographical position a country on the globe, identified with latitude and longitude in degrees and minutes.

Footnote 4

A typical tropical year (as in Fiji) in a solar calendar, based on tropical vernal equinoxes is 365 days, 5 hours, 48 minutes and 46 seconds. However, the other days and nights in hours differ according to different geographic location of the country on the global positioning. The cumulative total comes to 33 years before the new cycle commences.

Footnote 5

- a) The Julian calendar was started by Julius Caesar in year 46BC and it was based on the actual rotation of the earth around the moon. Julian calendars had a numeric number as its date. For example Sunday 20th December will be written as day 354. It was not very accurate and had an error of 1 day in every 128 years. The Julian calendar was also difficult in planning seasons for crop planting.
- b) The Gregorian calendar gives credit to Pope Gregory XIII. The main calculation mechanisms was neither done by the Pope nor the Vatican Council but by a famous Italian astronomer and philosopher Dr Luigi Lilio (b.1510-d.1576) of Naples. The new Gregorian calendar Rules were developed to make the system work: The Gregorian calendar must remain as solar calendar. When the change was effected, a number of

days had to be dropped and forgotten. Ten days were dropped in October 1582 for new alignment (which means 10 days of world history were completely wiped out). New rules were set to determine Easter.

- c) Pope Gregory XIII wanted Easter tied to the spring equinox as the most important issue.
- d) A leap year must be divisible by 4. If a year is easily divisible by 100, it is not a leap year unless it is also easily divisible by 400.
- e) Hence the Gregorian calendar is expected to become incorrect every 3,236 years.

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