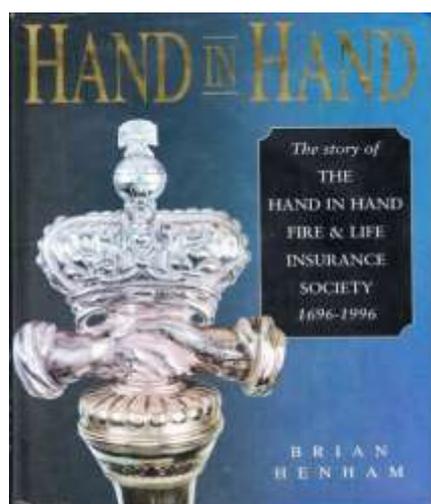


Don't Change the Financial Year, Change the Calendar

India was the richest country in the world and had the world's largest economy until the 16th century AD. (The World Economy: A Millennial Perspective, Angus Maddison). When the Europeans came to India, they already found in existence a highly organised system of commercial banking which was so eminently suited to the needs of the country that they found it convenient to use it for the purpose of their own trade. (The Bihar and Orissa Provincial Banking Enquiry Committee, 1929-30, Patna, 1930, Vol 1, P 75).

Business practices were primitive not only in England but whole of Europe that they didn't even had an effective calendar. The book gives a glimpse of loot, deceit, as well as genuine efforts to learn the art and science of calendar from Bharat by Europeans.



In Europe, Julian calendar was in force in 16th century. How ineffective it was can be best understood from the following quote from the book “Hand in Hand” released on the completion of 200 years of “Hand in Hand Fire & Life Insurance Society 1696 – 1996”: *“It is important to understand that in Britain at this time, the Julian calendar, first established by the Romans, was still in force. This accounted 25th March as the first day of the New Year. Therefore the 12th January, referred to in the previous paragraph was still part of the year 1696. However, the Julian calendar was proving to be very inefficient, as it actually gave an error of 11 minutes 14 seconds every year, which amounted to almost one and a half days over 200 years. To correct this, the Gregorian Calendar had been introduced....”*.

Under the old Julian calendar, April 1st coincided with the Hindi festival of Vaisakha i.e. Hindi new-year, so the East India Company in Bengal decided to synchronise it's financial year with the Hindi calendar to ease financial transactions. But, Britain's financial year at that time started on the first day of spring - 20th March. When

Britain adopted the Gregorian calendar in 1752, the calendar was bumped forward 10/11 days, which meant that the new financial year began on April 1st. Or something like that. (Nick, London UK,

<https://www.theguardian.com/notesandqueries/query/0,5753,-23469,00.html>)

The effect of British adopting April – March financial year was that the most erstwhile British colonies like New Zealand, Hongkong, South Africa, Canada etc. follow April- March Financial year.

It is important to remember all these now because on 6th July 2016 the finance ministry of India has set up a committee under former chief economic adviser Shankar Acharya to examine the desirability and feasibility of having new fiscal years. The other members of the latest committee are former cabinet secretary K.M. Chandrasekhar, former Kerala finance secretary P.V. Rajaraman and senior fellow at the Centre for Policy Research Rajiv Kumar. The committee has been asked to submit its report by 31 December 2016.

The Union finance ministry, in a statement, said the committee will examine the merits and demerits of various dates for the start of the fiscal year, including the existing dates. The committee will also examine the suitability of the fiscal year from the point of view of correct estimation of receipts and expenditure of central and state governments; effect on agricultural crop periods; impact on businesses, taxation systems and procedures, statistics and data collection; the convenience of legislatures for transacting budget work; and other relevant matters.

It doesn't say's explicitly that committee will look into historical matters or matters of national pride. Moreover "Historical Matters" and "Matters of National Pride" have been rarely part of "relevant matters" in this (Bharat) country, more so among bureaucracy, politician, judiciary and media.

The newspaper reports also suggest that the committee will also interact with other experts, institutions, government departments as necessary. Mint dated 7th July 2016, quotes (one such expert), N.R. Bhanumurthy, professor at the National Institute of Public Finance and Policy, who said except for agriculture, a change in dates for the fiscal year will not alter information flow for other factors cited by the finance ministry. He said *“While a July-June financial year in sync with the agriculture calendar will take care of the seasonality in agriculture, it will not be comparable with the rest of the world. A better option will be to switch to a January-December financial year, which will make it comparable with other countries,”*.

Before proceeding further let’s understand the relation between calendar and agriculture.

C. K. Raju in his article “Could India's "Failed" Monsoon Have Been Predicted by the Right Calendar?” writes:

At any rate, the monsoons have arrived on time according to the Indian calendar, since Rakhi too was "very late" this time, and the current month is still Srâvana. (The calendar we are talking about was calibrated for Ujjain, about 150 km from Bhopal.) The monsoons, however, are delayed by a month according to the Gregorian calendar: or, to put it differently, the Gregorian calendar has given the time of the monsoons in a grossly incorrect way. If the monsoons depend only on the tropical year, then, because of the difference between the tropical and the sidereal year, it is the Indian calendar that ought to have been out of phase by three weeks (around 21 days).

Admittedly, the argument sketched above is no more than a conjecture at this stage, but a whole lot of research involves chasing such conjectures, when we see that something does not "fit". Such conjectures, however, first need to be articulated, and my aim would be only to articulate this conjecture.

I guess the arguments made above are sufficient to keep the financial years as April – March.

Besides this “Financial years” vary across the world. For example, The US, Costa Rica follow October 1 – September 30. The first fiscal year for the U.S. Government started January, 1789. Congress changed the beginning of the fiscal year from January to July in 1842, and finally from July 1 to October in 1977 where it remains today. One of the reasons being “if the fiscal year was the calendar year, the country would run for an entire year on a budget voted on by previous Congress”.

The financial year followed by Chinese is January to December.

Japan follows April to March financial year.

Australia follows July to June financial year.

There is no uniformity in Financial Year across the world even after so many years of globalisation, not even among the biggest economies of the world or among the biggest trading partners

Each country uses its own financial year that suits its local conditions. Bharat needs to do the same.

Coming back to the committee. This is not the first time that the government is looking into changing financial year. In 1984, the LK Jha committee, (This is one of the reason that Secularists in India didn't shout Saffaronisation of Financial Year, when Prime Minister Narendra Modi led government set up committee to look into changing of financial year.) which was constituted to assess a change in the financial year, had recommended migration to the calendar-year cycle. The committee had said that changing the financial year to start from January would cushion the Budget from the impact of southwest monsoon.

The then Congress government had decided against accepting the recommendation on three main grounds. First, it had reasoned that advantages from the changeover were too minimal. Second, a change in financial year could upset collection of data from

the markets, would take a long time before normal rhythm of the budget cycle is restored. Lastly, the change would give rise to issues such as extensive amendments to tax laws and systems, financial procedures relating to expenditure authorisation, and other matters. (Indian Express, 7 July 2016)

(The Congress government would have changed the financial year, only if it would have known its Bharteeya or Hindu connect.)

Now coming to the point of Changing the Calendar. For this I will quote extensively from “*Time For A Secular Calendar*” an articles by CK Raju, where he says “*Why do Independence day, Republic day and Christmas come on the same day, each year, while the dates of Diwali and Holi keep changing? When I asked this question as a child, my mother explained that Diwali and Holi are Hindu festivals, unlike Independence day and Republic day, which are national festivals, and ours is a secular country. So, I grew up on the illusion that our secular national festivals are celebrated on a secular calendar.*

Actually, our national calendar is named after Pope Gregory because it is the Christian calendar. Just to state any date we are obliged to say AD and BC, as in “India became independent on August 15, 1947 AD”. AD and BC are not secular terms. AD (Anno domini) means the ‘year of our Lord’, and BC (Before Christ) means, ‘Before our saviour’. So, every time they state any date, all Indians must explicitly recite the key Christian beliefs that Jesus is their Lord and Saviour. This propagates other key Christian beliefs, for example, that Jesus is a historical figure, not a myth.

The Christian calendar is the sole calendar taught in our schools. The dates stamped on our certificates and passports are based on the Gregorian calendar. But the Indian calendar is integrally linked to culture. The dates of all Indian festivals (including Buddha Purnima and Mahavir Jayanti) are defined only on the Panchang, .. The exclusion of these other calendars alienates people from their culture.

Apart from culture, C K Raju also looks at the scientific angle. He writes:

Also, let's examine matters scientifically and choose the calendar which is scientifically superior. The Indian luni-solar calendar gets both the solar and the has 30 tithis, and corresponds exactly to one cycle of the moon. On the Christian

calendar, the months are of varying durations — 28, 29, 30, 31 days — and have no correlation with the lunar cycle. Indeed, the key concern of Augustus Caesar was that the month named after him should be no shorter than the one named after Julius Caesar!

What about the solar cycle or the length of the year? Many 'educated' Indians will today say it is 365 and one fourth day. That erroneous figure comes from the Julian calendar, which was the Christian calendar prior to the Gregorian. That error was huge, even by the standards of the fifth century Aryabhata. The true length of the (tropical) year is closer to 365.242 days.

This error has a curious origin. Science requires mathematics. But Greek and Roman numerals had no way to state precise fractions. Hence they settled for the easy fraction one-fourth. Because of this error (in the second place after the decimal point) the Julian calendar slipped by about a day in a century.



(A Page from Hindu Calendar, 1871-72, Source: Wikipedia)

Christoph Clavius, who headed the Gregorian calendar reform committee, introduced Indian arithmetic in the Jesuit syllabus only around 1572. Even in 1582, few Europeans understood precise fractions. The Gregorian reform did not state the length of the year as a precise fraction, as Aryabhata did; instead it used a convoluted system of leap years.

Hence, the Gregorian calendar gets the length of the year right only on an average, across a thousand years, for its stated concern was a religious one: To fix the date of Easter, then the main Christian festival. Because of this error, the equinoxes still do not occur on exactly the same day each year.

On the economic aspect of calendar, C K Raju says:

A third criterion is economic. The Indian economy depends upon agriculture, which depends on the monsoon. The Indian calendar identifies the rainy season as the months of Sawan and Bhadon. This knowledge is embedded in the culture, including Bollywood songs. However, the Christian calendar lacks the concept of a rainy season.

And C K Raju concludes:

Thus, from all three viewpoints of secularism, science, and economic interests, the Christian calendar is the worst possible choice, among all calendars, from the Indian to the Mayan. We should reject it or least teach the other calendars in schools and re-define Independence Day on one of our own calendars.

Why did India make so bad a choice? Because of the colonial superstition that everything Western is superior and must be uncritically accepted. That superstition, essential for colonial exploitation, grew out of the foolish belief in racist superiority. Ironically, Clavius's student Matteo Ricci sought scientific inputs from India for the

Gregorian reform of 1582. Scientists today use the day count or Indian ahargana which came to Europe at the same time, but was baptised as the Julian day-number system by Joseph Scaliger, a contemporary of Clavius.

However, post-independence, our calendar reform committee, headed by the physicist Meghnad Saha, asserted that “for calendarical purpose (sic)” it is “unmeaning” to use the sidereal year, used in many Indian calendars. Saha offered no reasons for his claim, which was just another assertion of Western superiority. He was alienated from his culture and ‘forgot’ that the key calendrical purpose in India is the rainy season or moisture balance. (or were all the facts were not at Saha’s disposal?)

That is decided by global atmospheric circulation which depends not on the heat balance alone, but also on the sidereal motion of the earth (Coriolis force) and lunar tides (hence phases of the moon). Saha was an expert on heat, but never studied global atmospheric circulation which was impossibly hard to do in his time. Over the last decade, our meteorology department has often wrongly predicted a deficient or delayed monsoon, when it came on time on the Indian calendar.

India needs to abandon the colonial superstition that everything Western is superior and examine matters critically. In doing so, it will be faithful to the values enshrined in the Constitution — secularism, and (real) science — and serve our economic interests. (Time For A Secular Calendar, 21 August, 2015, The Pioneer, C K Raju.)

After going through arguments based on Science, Economics and Culture it is obvious that Bharat needs not only to maintain the financial year as April – March but also to change from Julian Calendar to Bharteeya Calendar.

Change of Calendar can happen only under the leadership of Prime Minister Narendra Modi. Because it needs leaders with power to execute such changes. In the Calendar Reform Committee’s report Meghnad Saha says “Let me say at this stage that we as professional men can only suggest the measures; it is a simple lesson of history that

only the heads of state like Julius Caesar, or of religions like Pope Gregory XIII who wield the power to induce the people to the proposed measures of reform. An example is furnished by Greece; the Greeks produced the greatest astronomers of ancient times, but the city state of Greece employed nearly a hundred different calendars, as there was no central power in Greece to compel the people to use one calendar till the Romans came, and imposed their crude calendar on the whole of the Greece.”

In India, Akbar tried to impose Jelali calendar of Iran and failed. After Islamic conquest, the professional astronomer was deprived of state patronage and he had to depend on the public for his maintenance and he degenerated into a professional astrologer.

Hope Prime Minister Narendra Modi brings Bharat's glory back by instituting Bharteeya Calendar. Prime Minister has got Yoga its right place in the world. Hope he will be able to do the same for Bharteeya Calendar.

Matteo Ricco (1552 - 1610) was from the first batch of Jesuist trained in the new mathematics curriculum (astrology, astronomy, astronomical table preparation, calendar making etc). He lived in Cochin from 13 September 1578 to 15 April 1582 meeting Brahmins to learn recording and measuring time and collect manuscripts. He specifically made enquires about Indian calendar and collected connected manuscripts and took them when he left India. It is also said that he took Madhav's work of "Infinite Series" and circulated among the European scientists.

Johannes Keplar (1571-1630) studied the Kaliyuga and reckoning of Hindus, but accused that Hindus borrowed from the Christians. In 1990 it was pointed out that Kepler fabricated his data to obtain the planetary motion.

Pope Gregory XIII (1572 - 1585) was the reformer of the Julian calendar with fasts and feasts to be adopted by the Roman Catholics, heavily depended on the Indian astronomical tables.

Robert de Nobili (1577 - 1656) a Roman Catholic priest came to Madurai in 1606 and donned saffron robe and called himself sanyasi. He claimed that he recovered the lost 5th Veda and circulated it as Yasur Veda, by fabricating manuscripts, but he was exposed. He was specifically sent to Madurai with particular instructions from Rome to collect Indian calendar. He came from the family of Pope Julius III and Greogry XIII (1572 - 1585), who introduced Gregorian Calendar. Sivadarma a Telugu Brahmin taught him Sanskrit. Sivadarma converted to Christianity and provided many mansuscripts to Roberto de Nobili . He collected astronomical works and tables of Tamilnadu and studied the calendar making methods adopted by the south Indians. After his death all his collections were sent to Europe.

Nicolas Louis De La caile (1713-62) French Astronomer who determined the length of an arc of the meridian accurately keenly followed Indian tables for his calculation.

Leonard Euler (1707 - 1783) a Swiss mathematician wrote on Hindu Year.

La Gentil de La Galaisiere (1725-1792) studied Indian tables and Indian techniques at the Cormandel Coast. He learned methods to calculate Solar and Lunar eclipse.

Nevil Meskelyne (1732-1811) collaborated with John Bentley in interpreting the Indian astronomical tables.

John Playfair (1748-1819) a Scottish geologist and mathematician at Edinburgh University. He read a paper Remarks on the Astronomy of Brahmins on 2 March 1789. In 1797 he published another paper Observations on the Trigonometrical Tables of the Brahmins. He compared Indian and European astronomical tables

Pierre Simon Marquis De Laplace (1749 - 1829) was a fan of Indian astronomy.

Giovanni Cassini a French astronomer published an account of "Hindu Astronomy" in 1691. He studied the Indian tables and announced that they were accurate.

Erard Mollien presented a paper before the Insitute of France to prove the antiquity of the Indian Zodiac in 1853. He described the Kanya-Durga sitting on a lion dragging after it the solar car as: This is the reason why this Virgin Durga is not the simple memento of an astronomical fact, but verily the most ancient divinity of the Indian Olympus. She is evidently the same whose return was announced in all the Sibylline books -- the source of the inspiration of Virgil -- an epoch of universal renovation. . . . And why, since the months are still named after this Indian Zodiac, by the Sanskrit-speaking people of India, should that people have abandoned it to take that of the Greeks? Everything proves, on the contrary, that these zodiacal figures were transmitted to the Greeks by the Chaldeans who got them from the Brahmins of India.

Almaq Riccoli studied the Indian tables and dismissed the notion that European missionarises taught anything about astronomy to Hindus.

<http://www.hinduwebsite.com/history/the-interest-of-european-scientists-in-indian-calendar-and-chronology.asp>

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