

to Top-Gear

MISSION 676

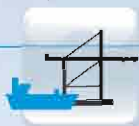


THE TIMELINE



Kochi Metro

To commence on 31 December 2015.



Vizhinjam Seaport

Project partner to be finalized by August 2014.



Kannur Airport

Laying of foundation-stone of terminal on 5 July 2014; touchdown of maiden flight on 31 December 2015.



Smart City

Opening of 6.5 lakh sq ft building on 25 March 2015.



National Waterway 3

Kollam-Kottappuram National Waterway to be commissioned in 2014.



Suburban Rail

Follow-up works based on detailed project report to begin this year itself.



Development of Roads, including National Highways

Work on By-Passes; Four-Lane Roads and National Highways progressing in time-bound manner.



Student Entrepreneurship Programme

2000 start-ups before 28 Feb 2016; Employment to 20,000 and Building of 2 lakh sq ft.

30 welfare and development projects, supervised directly by ministers, plus projects of other departments.

- Planning Commission to come up with projects for the effective implementation of Annual Projects.
- Five-pronged approach under the Chief Secretary for making government services quick and efficient:

1. Right to Services
2. e Governance
3. Disposal of Pending Files
4. Right to Hearing
5. Simplifying of Administrative and Financial Procedures

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Kerala moving forward



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COVER STORY

Mahatma Gandhi's ideas and principles have never ceased to inspire the world. "Be the change that you want to see in the world", he said and lived by those words. Now, on his birth anniversary, let's go beyond what the world knows about him.

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Oommen Chandy

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The 125th anniversary of Indian circus was however celebrated in Talkatora Stadium, New Delhi jointly by Indian Circus Federation and Indian Circus fans association and out of the 18 artists presented there to receive honours were malayalees.

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When Einstein Goes Wrong...

"Generations to come, it may well be, will scarce believe that such a man as this one ever in flesh and blood walked upon this Earth," said eminent scientist Albert Einstein on the occasion of Mahatma Gandhi's 70th birthday. But, after seven decades, it seems that Einstein's prophecy has gone wrong with today's time and space though Einstein articulated this out of immense respect for Gandhi. The admiration to the Father of our Nation is on the increase among the young globally and generations have been getting inspired by the timeless influence of this stoic. Every pertinent decision, whether it is of centre or state governments, is influenced by Gandhi. The recent decision of the Kerala government regarding the sale of alcohol is not an exception.

Mahatma Gandhi, the matchless leader, was a born revolutionary with a difference. His revolution was of two fold. One was spiritual whereas the other was dedicated to the independence of India. What was manifested as his outer revolution was the result of inner one. His whole life was an experiment seeking truth. That placed him as an iconoclast and maverick among other revolutionaries and fighters past or present. He gave us his life as a guiding light to walk to a much better world.

Gandhi led an austere life. Alcoholic drinks and tobacco were taboo to him. Even milder intoxicants were loathed by him. He wrote many articles against all types of intoxicants. He took strong steps against social evils such as alcoholism and drug addiction. In an article in the 'Indian Opinion' in 2nd February, 1907 he wrote, "those who chew betel-leaf and nut should do so at fixed hours, as with other kinds of food so as to avoid giving the impression that we are eating all the time. Those who chew tobacco have a lot to think about. They disfigure every spot by spitting. Addicts to tobacco, as the Gujarati proverb goes, spoil the corner of the house where they chew tobacco, the whole house if they smoke and their clothes if they take snuff."

The relevance of Gandhi is getting more and more important as the collective morality across Globe is almost at its nadir. Gandhi's emphasis on moral righteousness of self-purification, non-violence, self-satisfaction and peace is the perfect antidote for corruption, nepotism and violence. He did a lot and laid down his life for what he wished to do. In the wake of his 145th birth anniversary, the utmost thing we can do is to try and carry on and live up to the principles which Gandhiji taught. Let us dedicate the well known lines of William Wordsworth "Bliss was it in that dawn to be alive, But to be young was very heaven!" to the freedom fighters who lived during the legendary era of Gandhiji.

Mini Antony IAS
Editor in Chief

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Paying Floral Tributes



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Youth Entrepreneurship Policy Soon

The government will soon announce a policy for promotion of young entrepreneurs, Chief Minister Oommen Chandy has said. A committee appointed by the State Planning Board has submitted a report with 27 recommendations in this regard, the Chief Minister said in a statement.

New entrepreneurial projects were expected to come up in the tourism, business innovation, electronics, agriculture, manufacturing, and health care sectors, apart from IT. Live-work-play campuses of 5,00,000 sq ft each would be set up for young entrepreneurs. The Industries Department had received 4,897 applications to set up new start-up ventures. When the government started encouraging start-ups the plan was to have 1,000 start-ups in 10 years. But 777 companies have already been formed in just two years. Of them, 276 are student initiatives. As many as 4,897 applications are under the consideration of the Industries Department, the CM said.

Kerala's industrial culture was on the threshold of a major transformation fuelled by innovation and entrepreneurship. The Young Entrepreneurship Summit

(YES) held at Angamaly earlier this month had marked the beginning of the State's journey to a new age. With a mechanism for funding and handholding of new enterprises, the State's industrial culture was poised for big changes. Though the organisers had expected 2,000 participants for YES, the turnout was more than 4,500. "Idea is king in the digital era. Some of the ideas that were presented at YES might rule the world tomorrow. Or there may be others who are inspired by the ideas presented here," the CM said.

The enthusiasm of the youngsters was evident at the event. The summit had thrown up an array of radical ideas with the potential to change the world. It signalled the transformation of the new generation in Kerala from job seekers to employers. Many of the innovative concepts highlighted at YES were ideas with application potential. The government had drawn up a pilot programme to mould 80 viable entrepreneurial ventures. An amount of Rs.20 crore had been earmarked as angel funds in the first phase. The fund would be used to establish start-ups and set up incubators, said the Chief Minister.

Skill Park in all Constituencies: K M Mani

Finance Minister K M Mani has said that the government will set up a Community Skill Park in all constituencies of the state. He was speaking after inaugurating a conference held as part of a development seminar, 'Vision 2030'. The government had announced 30 community skill parks in the state budget 2014-15. These parks are the refurbished form of the Additional Skill Acquisition Programme (ASAP) of the state government. "Out of the 12 crore rupees earmarked for the project, rupees six crore each would be utilised respectively for infrastructure development and obtaining required machinery. These will function as a skill hub, the minister said.

J.C. Daniel award for MT

Writer and filmmaker M.T. Vasudevan Nair has been chosen for the Kerala government's J.C. Daniel Award for lifetime achievement in Malayalam cinema for the year 2013. Minister for Cinema Thiruvanchoor Radhakrishnan while announcing the award said, "M.T.Vasudevan Nair is one of the greatest among the screenplay writers and directors in Malayalam cinema. He has behind him more than 50 years of all-round contributions to the growth of Malayalam cinema."



The award was decided by a jury consisting of K. Jayakumar, Madhu, P.V.Gangadharan, Rajeevnath and PRD Secretary Rani George. It will be presented along with the State Film Awards for the year at a function to be held at the Kanakakkunnu Palace on October 17.



RCC elevated to State Cancer Institute

Regional Cancer Centre, Thiruvananthapuram has been elevated to one of the 20 apex State Cancer Institutes in the country. This was announced by Union Health Minister Harsh Vardhan. "On Kerala's demand to develop the RCC as a National Cancer Institute, the Centre was working towards it. I share Kerala's dream in this regard," the Union Minister said.

The Union Minister lauded Chief Minister Oommen Chandy for his decision to reduce the availability of liquor in the State and introduce prohibition in stages. It was the responsibility of every government to save people from the scourge of tobacco and alcohol addiction. A social awakening was needed to inspire people to quit alcohol and tobacco. A nationwide movement was required to promote health

education and preventive health-care concepts so that early diagnosis of diseases like cancer was possible. Kerala, with its high level of literacy and excellent health system, was best poised to launch health as a major social movement and create health-care models which could be replicated across the nation, the Minister added said.

State Pins Hope on Youth for Growth: P K Kunhalikutty

Kerala is willing to do away with the revenue from liquor, and the State pins hope on the young entrepreneurs to garner revenue. The State Government targets to transform Kerala into a State of top entrepreneurship in the country, and society into a job-creating society from a job-seeking one, said Minister for Industries P K Kunhalikutty while addressing the Young Entrepreneurs Summit being organised by the Industries Department, in association with the Kerala State Industries Development Corporation (KSIDC).

"In the past, we have tried different modules like the Global Investors' Meet (GIM) and the 'Emerging Kerala' meet. After extensive deliberations and brainstorming, and after careful evaluation of different trends, we have come to the conclusion that we can bank on the youngsters who have innovative ideas to write a different story. This Young Entrepreneurs Summit is the manifestation of that.

"The government's ultimate aim



is to make Kerala the preferred destination for start-ups. We want to take a step forward to put Kerala at the top of the country's industrial map. In this effort, the entire government machinery is with the young entrepreneurs," the minister assured.

Fisheries Minister K Babu, who

inaugurated the event, said that the GCC countries were built by the people of Kerala, and that it was time to rebuild Kerala. PWD Minister V K Ebrahim Kunju said that all the mega road projects envisaged in the State would be completed in one-and-half years, thereby providing better infrastructure facilities for the

growth of the entrepreneurial culture. "Projects such as the expansion of the Infopark, Startup Village and the Smart City will be completed on a war-footing, and will be made operational within the next 18 months. We are committed to delivering this," the Minister said.

OBITUARY



K Udayakumar passes away

K Udayakumar, the Arjuna Award winner and ace volleyball player of the eighties who had gifted many dream victories for the nation and the state, passed away. He was 54. A Deputy Commandant of Kerala Police, Udayakumar was ADC to various Governors who had served the state for the past eight years. He is survived by wife Lekha, a school teacher and daughters Anjali and Pallavi. He is the son of Karunakara Kurup and Ammini Amma of Parampil House in Mararikulam.

One among the genre of the late Jimmy George and Cyril C Valloor, Udayakumar had enthralled the ground and admirers for more than a decade and carved a niche for him. As a member of the Indian Junior team, Udayakumar took part in the Junior Asian Championship in 1980 and a year later led the team in the World Junior Championship at Colorado Springs in the US.

Under his leadership, the Kerala Volleyball team lifted the Federation Cup in 1981. He had been in the Indian team in four Asian Championships. In 1989, he led the Indian team in the SAF Games and won the silver cup. He was also part of the Indian volleyball team which won the Gold cup in the SAF Games in 1991. He donned the role of a coach of the volley team of Dubai for a while, but came back in 1996 and became part of the Kerala team. Taking into account his contributions to the Indian Volleyball, the nation had honoured him with the Arjuna award in 1991. He is also a recipient of the G V Raja award (1989) and Jimmy George award (1989). Udayakumar had been ADC to seven Governors, including incumbent P Sathasivam.



Yesudas hails new liquor policy

Singer K.J. Yesudas has praised the government for its decision to move towards total prohibition. While accepting the State government's award for lifetime achievement Yesudas recalled that this was a desire that he had cherished for long and voiced at various places. He was also all praise for the State government's scheme to provide cochlear implants for aurally challenged children from poor families.

Presenting the award, Chief Minister Oommen Chandy said Yesudas was Kerala's great asset. "Yesudas had few equals not just for his proficiency as a singer, but also for his active interventions in and social, cultural, and humanitarian issues and secularism", said the Chief Minister. K C Joseph, Minister for Cultural Affairs, Leader of the Opposition V.S. Achuthanandan was also present. The award carries a purse of Rs.1.5 lakh, a statuette and citation.

'Rights of all Workers will be ensured'

It will be ensured that the employees working in textile shops and other similar establishments are allowed to sit during duty-hours and amendments made to the Kerala Shops and Commercial Establishments Act are strictly implemented, said Labour Minister Shibu Baby John. He was speaking at the discussion organised by State Youth Commission regarding the amendment to the Act. "A toll-free number of the Labour Department will be functioning round-the- clock for employees to lodge complaints. It will be made mandatory to disburse salary through banks," the minister said. The discussion was

organised in the backdrop of the issue of denial of permission for staff in textile shops to sit during duty hours apart from not providing weekly off and other necessary benefits. "District-level monitoring committees will be set up to address complaints. The shops have been divided into three categories according to the number of workers employed. The fine for not adhering to the provisions of the Act has been increased. The existing fines which range from Rs 100 to Rs 250 has been increased in the range of Rs 5,000 to Rs 10,000," the minister said.



Minister for Education PK Abdu Rabb inaugurates the Literacy Week Celebration

High-level meet held to discuss crisis in Plantation Sector

Amid the ongoing crisis in the plantation sector, a high-level meeting of all stakeholders in the rubber industry, attended by Chief Minister Oommen Chandy, made various suggestions and proposals before Union Minister of State for Commerce Nirmala Sitharaman.

Chief Minister Oommen Chandy pointed out to the Commerce Minister that large-scale import of rubber was done in the past few months, which is more than what was needed to meet the domestic deficit. "The wages had gone up when rubber prices were high, and now the farmers find it difficult to continue rubber cultivation," added the CM.

The Chief Minister suggested that the volume of rubber being



imported should be limited to meet the deficit, and that too in lean production periods, and the import duty should be increased to 25 per cent, or `35, whichever is higher.

"It was an absolutely thoughtful

and productive meeting," said the Union Minister Nirmala Sitharaman after the session. She said problems faced by all sectors and stakeholders in the rubber industry would be heard before taking a decision on

addressing the present situation. "It was felt that any decision taken to diffuse the present crisis should reflect the ground reality, and that's why it was decided to convene a meeting of all the stakeholders. The Ministry would also like to get suggestions and solutions to address the situation. But, any action taken should ultimately ensure adequate supply of quality raw materials to meet the growing demands of the industry," said the Minister.

Finance Minister K M Mani, Irrigation Minister P J Joseph, Jose K Mani MP, K V Thomas MP, K N Balagopal MP, Anto Antony MP and Joy Abraham MP also expressed their views and suggestions at the meeting.

Equal access to health services for all: CM

Chief Minister Oommen Chandy has said that the government is giving top priority to health and educational sectors and the focus is to remove disparities in providing health services to the people living in rural areas. Revolutionary changes had to be made in health and educational sectors and those living in urban and remote rural areas should get equal access to health and education. It was with a view to establish medical colleges in all the districts that steps were initiated and works were being completed in a time-bound manner, said the Chief Minister while inaugurating the Idukki Government Medical College.

Those living in Idukki district now have to travel to Kottayam Medical College or Theni Medical College for emergency care. This situation should change. Ensuring equal opportunities for all is the focus of the government. Steps are being taken to ensure that welfare activities continued despite the present financial crisis, added the CM.



Minister for Forest, Thiruvanchoor Radhakrishnan inaugurates the Cycle Rally organised in connection with Wildlife Week Celebrations.

Directives to implement Attappadi package

Minister for Scheduled Tribe Development P K Jayalaxshmi has issued strict instructions to the officials for effective implementation of the Attappadi package. Applications under the Forest Rights Act would be settled within three months. Directives regarding implementation of the Attappadi package were issued to ST Development Department director, Palakkad District Collector and Ottappalam Sub-Collector. Decision would be taken within three months on applications under the Forest Rights Act (for both individual rights and community rights) which are still pending. The Rs three-crore project for bringing back traditional

farming in Attappady is currently going on.

A rupees 12-crore PVTG project has also been sanctioned. Rs 11.40-crore has been sanctioned for construction of Anavayi-Chundakki road in Attappady. Construction of the road will start soon. Based on the data collected through Jathak Janani software from 5,874 children in Attappady, those with nutrition deficiency are being treated at the Nutrition Rehabilitation Centre, informed the Minister in a statement. An amount of ` 1.60 crore has been sanctioned for various livelihood projects at Attappadi

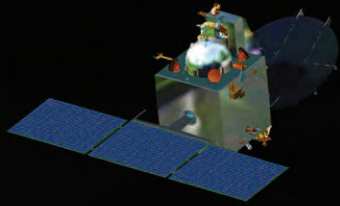


MANGALYAAN

Mars orbiter mission is ISRO's first interplanetary mission to planet Mars. The orbiter is designed to orbit Mars in an elliptical orbit to collect scientific data. The mission is primarily a technology demonstration mission with some important scientific objectives also.

Red Planet

Rendezvous with the



Mars has always been a world shrouded in mystery. Mars was thought to be a bright red star shining in the night sky. Sophisticated technology and modern space missions have provided scientists with a wealth of knowledge and information. Numerous questions remain unanswered. Although Mars shared certain characteristics with the other planets, sky watchers observed that it was unique in several ways. Because of its peculiar behavior, along with its fiery red color, Mars was associated with war, violence, danger, and death. As a result, some ancient peoples named the planet after their gods of war. The Greeks called it Ares, and the Romans called it Mars.

Space missions are extremely expensive, but scientists are convinced that Mars exploration is crucial and must continue. That is because Mars is quite similar to Earth, and about 4.6 billion years ago, when the two planets were formed, they may have been almost identical. Geologists believe there was a time when Mars had a warmer and wetter

climate, vast quantities of surface water, and an atmosphere that was much like the Earth's. Over the course of its history, however, Mars has undergone such drastic changes. Today, the planet's surface is dry and lifeless, its atmosphere is unfit for human life, and its average daily temperature is more than even the coldest place on Earth. What caused these drastic changes? Is Earth destined for the same fate? By continuing to explore Mars, scientists can gain a much greater understanding of the red planet, as well as insight into what the future may hold for Earth.

Even though it is doubtful that life exists on Mars today, was there a time when it did? If so, what happened to it? The absence of living things is likely related to the lack of water on the planet, which is another unsolved mystery. Scientists have concrete proof that water once ran freely on Mars, but there appears to be no trace of surface water now. What caused it to disappear? Recent missions to Mars have provided direct evidence for the presence of hydrated minerals on the exposed

surface and of water at sub-surface regions. The possible presence of methane has been proposed based on limited observations. Understanding the loss of the Martian atmosphere, and in particular, carbon dioxide and water, is also essential for understanding the evolution of the Martian atmosphere. The Indian Mars mission includes payloads to obtain data covering all the above important aspects that will advance our current understanding of the planet Mars.

Mars Orbiter Mission (MOM)

Mars orbiter mission is ISRO's first interplanetary mission to planet Mars. The orbiter is designed to orbit Mars in an elliptical orbit to collect scientific data. The mission is primarily a technology demonstration mission with some important scientific objectives also. The orbiter will study the physical features of Mars and the Martian atmosphere.

Mars Orbiter Spacecraft

The spacecraft configuration is a balanced mix of design from flight proven IRS/INSAT/Chandrayaan-1.



Scientific objectives

- To study the climate, geology, origin and evolution of Mars
- To study the sustainability of life on the planet.

The Mission

The mission consisted of three phases. During the geocentric phase, the spacecraft was launched to the elliptic parking orbit by the PSLV C25, rocket. Then it was gradually maneuvered to a hyperbolic trajectory and it escaped the Earth sphere of influence, which is up to 918347 Kms. The Mars orbiter entered the heliocentric orbit. To reach Mars with minimum energy consumption, Hohmann transfer orbit was used. This is the orbit used to send a spacecraft to

Modifications required for Mars mission are in the areas of Communication, Power, Propulsion systems (mainly related to Liquid Engine restart after nearly 10 months) and on-board autonomy.

Mission Objectives

- To develop the technologies required for design, planning, management and operations of an interplanetary mission.
- To Orbit maneuvers to transfer the

spacecraft from an elliptical Earth orbit to a heliocentric trajectory and finally insert it into Mars orbit.

- Development of force models and algorithms for orbit, attitude computations and analyses, navigation in all mission phases.
- To maintain the spacecraft in all phases of the Mission meeting Power, Communications, Thermal and Payload requirements
- To incorporate autonomous features to handle contingency situations.



Mars with the least amount of fuel. During the journey to Mars two trajectory corrections were carried out. The spacecraft arrived at the Martian sphere of influence at 573473 Kms in a hyperbolic trajectory. At the time the spacecraft reached the closest point to Mars it was captured into the planned orbit around Mars through a Mars orbit insertion manoeuvre. On November 5th 2013: PSLV-C25, successfully launched Mars Orbiter Mission from Sriharikota .

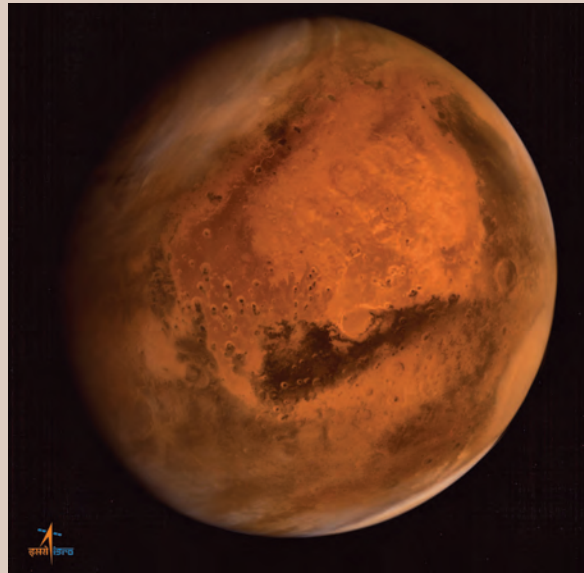
MANGALYAAN

On October 19th Comet A1 2013 Siding Spring will pass near Mars at a distance of 132000 Kms. The atmospheres of the Comet and Mars will have an encounter and this is an important event to observe.



Payloads aimed at understanding the evolution of Mars are

i Lyman Alpha Photometer (LAP) for estimation of Deuterium /Hydrogen ratio based on absorption spectra of Deuterium and Hydrogen. It consists of an UV detector equipped with gas filled pure molecular hydrogen and deuterium cells with tungsten filaments that are located between an objective lens and a detector. Deuterium, also known as heavy hydrogen, is one of two stable isotopes of hydrogen, and contains one proton and one neutron in its nucleus while the common hydrogen isotope (Protium) has no neutron in the nucleus. Determining the D/H ratio in the atmosphere allows scientists to learn more about the atmospheric environments on Mars with a special focus on atmospheric loss.



exosphere. with Mangalyaan in its operational orbit, MENCA is to estimate the upper limits of the neutral density distribution and composition around Mars. Studying Martian exosphere will provide valuable data on the present conditions. A quadrupole mass spectrometer will be employed to study the neutral composition of the Martian upper atmosphere.

v Mars Colour Camera (MCC): Imaging of topography of the Martian surface. It provides images in the visual spectrum. Acquires color images of planet Mars. MCC covers a

ii Methane Sensor for Mars (MSM): Methane on Mars can have a number of origins. When methane was first discovered on Mars, many saw the presence of it as a clear indication of life or microbial activity, but aside from biological processes, methane can have a number of origins. Geological processes such as volcanism or reactions involving iron oxide, water and carbon dioxide can produce large amounts of the gas. In addition to these two traditionally known origins on atmospheric methane, both, on Earth and on Mars, scientists have a number of other theories. In recent years, exogenous sources have been studied. Methane being produced by micro-meteorites and interplanetary dust particles that enter the thin Martian atmosphere and settle on the surface. The instrument has a sensor to measure methane at several ppb level.

map of composition and mineralogy of the Martian surface. It uses a 120x160 element bolometer array as detector and consists of fore optics, slit, collimating optics, grating and reimaging optics. The knowledge on type of minerals present in any planetary system provides the information on the conditions under which minerals are formed and process by which they are weathered. Much of what we know about the elemental composition of Mars comes from orbiting spacecraft and landers. Most of these spacecraft carry spectrometers (A spectrometer is an instrument used to measure properties of light over a specific portion of the electromagnetic spectrum, typically used in spectroscopic analysis to identify materials) and other instruments to measure the surface composition of Mars.



spectral range of 400 to 700 nanometers - the visible spectrum. At periapsis (near Mars) MCC provides images with a 50 by 50-Kilometer frame size and a resolution of 25 meters per pixel. At apoapsis (distant from Mars) the camera provides a wide field of view of 8,000 by 8,000 Kilometers. Imagery provided by MCC are used to study Martian surface topography.

iii Thermal Infrared imaging Spectrometer (TIS): TIS will provide

iv Mars Exospheric Neutral Composition Analyzer (MENCA): The objective of MENCA is to study the exospheric neutral density and composition above the Martian surface. The instrument examines radial, diurnal, and seasonal variations in the Martian

Subsequently five orbit raising manoeuvres were carried out.

Spacecraft has traversed beyond the Sphere of Influence (SOI) of Earth extending about on 4th December, 2013. In between two trajectory corrections were carried out. On 2nd September the test firing of Main Liquid Engine of Mars Orbiter Spacecraft was successful. On 24th September, Mars orbiter entered the Martian orbit. The orbit of the

spacecraft around Mars is 423 X 80000 Kms elliptical. It takes approximately three Earth days for one complete orbit. Mars Orbiter started sending pictures within hours of its orbital insertion. The total cost of the mission is Rs 450 crores.

On October 19th Comet A1 2013 Siding Spring will pass near Mars at a distance of 132000 Kms. The atmospheres of the Comet and Mars will have an encounter and this is an

important event to observe. The comet may harbour methane and water, which will be studied by the Mars orbiter. NASA's MAVEN orbiter reached Mars on 22nd September. The objective of that spacecraft is to study the Martian atmosphere and the effects of solar wind in the loss of atmosphere. It will also observe the comet closely. ■

The writer is a popular science author and researcher in Astronomy and Cosmology



Article by Chief Minister Oommen Chandy
after his visit to Gandhi Sevagram, Wardha

Memories come alive

I had many opportunities to visit most of the places related to Mahatma Gandhi. But it was last year that I had the opportunity to visit Wardha Gandhi Sevagram near Nagpur. It was also the occasion of the national meet of the Youth Congress. But my priority was to visit Sevagram.

Sevagram had its beginning when Gandhiji after his historic Dandi march in 1930, declared that he would not return to the Sabarmati Ashram until freedom was granted. For about 10 years, since 1936, Gandhiji remained at the helm of most of the revolutions including Quit India Movement from Sevagram, which had minimal facilities.

A look around Sevagram would tell us a lot about Gandhiji. Simplicity is the hallmark of this ashram. Here, places where people belonging to various religions and communities prayed and worked together have been preserved, as it was originally. Bappu Kudi and Baa Kudi where Gandhiji and Kasturba stayed respectively were noted for their modesty. Close by is the hut of Parchure Shastri, who suffered from leprosy and whom Gandhiji took care of. My visit to Sevagram also reminded me of the words of renowned scientist Albert Einstein: "Generations to come, it may well be, will scarce believe that such a man as this one ever in flesh and blood walked upon this Earth."

It was amid several achievements that we recently celebrated our country's 68th Independence Day. Being an Indian the reasons are many for me to hold my head high and feel happy about. In a span of seven

decades, India emerged as a noted world economic power. A country that once imported rice, wheat and clothes now has its godowns stocked with surplus of these items. India was able to make a giant leap in the field of science and technology through Mars exploration, Chandrayaan mission, satellite launches, modern missile technologies, atomic energy etc. Along with all these, our nation also marched steadily to become the world's biggest and strongest democracy. We survived wars and the threats of terrorism and overcame all kinds of sectarian forces to safeguard our democracy. These achievements have made us on a par with many other countries in the world. In many countries that attained freedom during the same period of that of ours, democracy stumbled and paved the way for dictatorship and military rule; but our tricolour continued to flutter with great pride. We were able to do so, because the nation's foundations have been built on the ideals of Mahatma Gandhi. The country's first Prime Minister Pandit Jawaharlal Nehru and the chief architect of our Constitution B R Ambedkar; all have imbibed Gandhian values.

Our country's achievements so far inspire us to go for more in the future. We still have many problems to resolve. But it is unjust to project just the problems, ignoring our achievements and to forget those who had sacrificed their lives for the nation. I could only watch in shock the manner in which the Father of our Nation gets disgraced.

Reader's Digest International has published an elaborate book on some of the major events of the 20th century. In that, the chapter on Mahatma Gandhi begins with these words: "Here is a hermit leader.....". And it goes on to say that when the next century opens up its intellectual horizon fully; the only figure that would remain with clarity would be that of Gandhiji. The great historian Arnold Toynbee had predicted that Gandhiji's importance is in the 21st century. United Nations Organisation since the year 2007 has declared October 2 as World Non-violence Day. The significance of Gandhian values and ideals will remain immortal and their significance is rising by the day.

Gandhiji's fight against the British was rooted in non-violence or ahimsa. But his struggle against the British was not confined to the



at Bappu Kudi



liberation of a nation or its people. Gandhiji once said that the British Empire was just one of the obstacles on his way to realize a new society. The world came to reckon Gandhiji through the unique approach of his in the fight against the Britishers during the freedom struggle of India. The independence thus gained through sufferings and sacrifices and by upholding truth and non-violence, became a unique chapter in the history of the world. At a time when we see blood being shed in different parts of the world, the struggles based on non-violence is gaining attention of the whole world.

A major reason for clashes witnessed around the world is religion and the beliefs based on it. All of these can be avoided if people belonging to various religions accept and respect each others' viewpoints. Gandhiji supported the exchange of ideas between

religions. He encouraged the co-operative endeavour of different religions and provided opportunities for them to live and work together. Gandhiji said: "The need of the hour is not 'One Religion'; but mutual respect and tolerance from people belonging to different religious faiths. What we need is unity in diversity and not a stagnant unified entity."

Gandhiji had foreseen that economic equality is the key to complete independence. According to him, the governance based on non-violence would never be a reality unless the gap between the poor and the rich was bridged. Gandhiji also prophesied that if money was not distributed for social good, it would lead to bloody revolutions in the not so distant future. That is what is happening nowadays in some parts of the world. "Recall the face of the poorest and the weakest man you have seen, and ask yourself if this step you contemplate is going to be of any use to him." The administrators should keep this welfare view of Gandhiji close to their heart.

In Gandhiji, we can seek solutions for global warming and environmental changes. It was he who had presented before the conscience of the world the

man's needs; but not every man's greed." By saying so, Gandhiji highlighted the need for mankind to live in harmony with Nature and stop the ruthless exploitation of its resources.

We also remember Gandhiji for his strong resentment against the social evil of untouchability. He worked hard for the abolition of caste system and called dalits the 'Children of God'. Gandhiji stayed with them and unleashed series of struggles for their rights and uplift. He even cleaned toilets himself. Gandhiji went on a fast at Yervada jail, protesting against the Britisher's vicious move to segregate the dalits from the Hindu community and to give them the right to vote. Gandhiji made social reforms integral to freedom struggle. His blessings and support was there for the struggles against untouchability that once prevailed in Kerala. During his visits to Kerala, Gandhiji met Ayyankali and Sree Narayana Guru and he visited many dalit colonies too. He mobilized fund for the activities of the Harijan Sevak Sangh. The historic Temple Entry Proclamation in Kerala was an outcome of Gandhian way of struggle. Yet, he was criticized for being an opponent of the dalits.

Those who visit Sevagram return from there with reinforced belief in Gandhiji. I still cherish the memories of that place just like after a visit to a holy place.

As I stood before Bappu Kudi, the seven social sins displayed there caught my attention. They are: Politics without principle, Wealth acquired without labour, Business without morality, Knowledge without character, Pleasure without conscience, Science without humanity and Worship without sacrifice. They aptly and constantly remind us of the essence and meaning of freedom. ■



need for preserving our resources and utilizing them in a judicious way for sustainable development. Gandhiji gave us the rightly warned us, when he said: "Earth provides enough to satisfy every



Mahatma Gandhi's ideas and principles have never ceased to inspire the world. "Be the change that you want to see in the world", he said and lived by those words. Now, on his birth anniversary, let's go beyond what the world knows about him.



Inspiring

Few months back an interesting post appeared in 'wkinut' on the history of 'dry day'. The post titled 'Father's wish' says, "Seventy five years ago, on 3rd October, 1937, The Milwaukee Journal came out with the Indian news about a desperate battle against alcohol and for freedom of the country. It reported the news about the prohibition in India with the headline "Dry Crusade is begun on Gandhi's Birthday". It reported that the crusade began to mark "frail and little man" Mohandas Gandhi's 68th birthday which was observed throughout the Indian subcontinent with mass meetings and prayers and the inauguration of the prohibition campaign was at Madras (Chennai). The Madras province officials smashed liquor bottles in the streets and ten new shops opened to compete with the toddy (local liquor) shops. The propagation against alcohol began in 1937 and the "dry day" (abstinence from alcohol and closing of liquor shops) began on 2nd October, 1948, being the first birthday after the assassination of the "Father of the Nation."

Mahatma Gandhi, the leader of India's freedom struggle and father of the nation, campaigned actively against the production, sales and consumption of Liquor. During the pre-independence period onwards, the Indian National Congress also recognized prohibition as one of the main tasks before the country. Mahatma Gandhi himself issued several strong statements against the sale and consumption of alcohol. In 1926 he wrote, "If we are to make progress, we must not repeat the history but make new history. We must add to the inheritance left by our ancestors. If we may make new discoveries and inventions in the phenomenal world, must we declare our bankruptcy in the spiritual domain? Is it impossible to multiply the exception so as to make them the rule? Must man always be brute first and man after, if at all?"

In 1931, he wrote in an article that appeared in Young India, "If I was appointed dictator for one hour for all India, the first thing I would do would be to close without compensation all the liquor shops, and compel factory owners to produce humane conditions



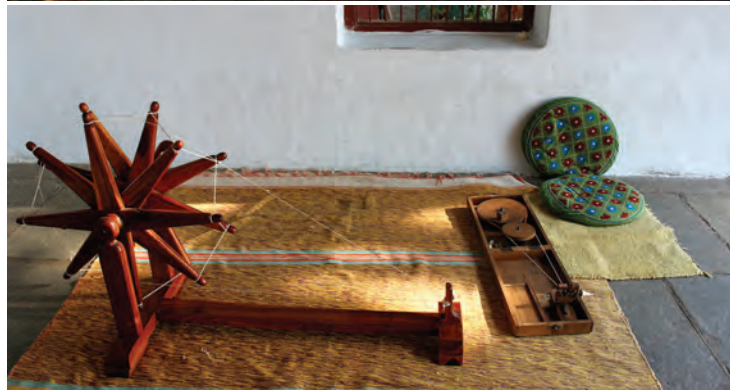
Generations

rooms where these workmen would get innocent drinks and equally innocent amusements." The evil what the liquor does to families were long felt by Gandhi. Hence, in Harijan he wrote, "It is wrong and immoral for a nation to supply intoxicating liquor to those who are addicted to drink. The drink habit destroys the soul of man and tends to turn him into a beast, incapable of distinguishing between wife, mother, daughter and sister. I have seen men who forget this distinction under the influence of liquor".

Mahatma Gandhi considered the consumption of alcohol as a major social evil and encouraged complete prohibition in India. He was not in favour of limited or regulated consumption of alcohol. In the booklet titled 'Key to Health, he says, "There is a school that favour limited and regulated consumption of alcohol and believe it to be useful. I have not found any weight in their argument. Even if we accept their view for a moment, we have still to face the fact that innumerable human beings can't be kept under discipline. Therefore, it becomes our duty to prohibit alcoholic drinks even if it were only for

the sake of this vast majority. Parsis have strongly supported the use of toddy. They say that although toddy is an intoxicant it is also a food and even helps to digest other foodstuffs. I have carefully examined their argument and have read a fair amount of literature pertaining to this subject. But I have been a witness of the terrible straits to which toddy reduces the poor and therefore I have come to the conclusion that it can have no place in man's food."

In another article titled India's Case for Swaraj, Gandhi says, "Liquor, as we say, is an invention of the devil. In Islam it is said that when Satan began to beguile men and women he dangled before them the "red water". I have seen in so many cases that liquor has not only robbed men of their money but of their reason, they have for the time being forgotten the distinction between wife and mother, lawful and unlawful. I have seen drunken barristers wallowing in gutters carried home by the police. I have found on two occasions captains of steamers so dead drunk as to be incapable of keeping charge of their boats until they came to their senses. For



"If we are to make progress, we must not repeat the history but make new history. We must add to the inheritance left by our ancestors. If we may make new discoveries and inventions in the phenomenal world, must we declare our bankruptcy in the spiritual domain?"

both flesh-meats and liquor the sovereign rule is "We must not live in order to eat and drink and be merry, but eat and drink in order to make our bodies temples of God and use them for service of man." Liquor may be a medical necessity on occasions; and when life seems to be extinct it may be

possible to prolong it with a dose of liquor, but that is about all that can be said for it."

Mahatma Gandhi advised 'Neera' to substitute toddy. He explains: "The advantages, attributed to toddy, are all available from other foodstuffs. Toddy is made out of Khajuri juice.

Fresh Khajuri juice is not an intoxicant. It is known as Nira in Hindustani and many people have been cured of their constipation as a result of drinking Nira. I have taken it myself. Though it did not act as a laxative with me, I found that it had the same food value as sugarcane juice. If one drinks a glass of Nira in the morning instead of tea etc., he should not need anything for the breakfast. As in the case of sugarcane juice, palm juice can be boiled to make palm jaggery. Khajuri is a variety of palm tree. Several varieties of palms grow spontaneously in our country. All of them yield drinkable juice. As nira gets fermented very quickly, it has to be used up immediately and therefore on the spot. Since this condition is difficult to fulfill except to a limited extent, condition is difficult to fulfill except to a limited extent, in practice, the best use of nira is to convert it into palm jaggery" (Key to Health, pp.32-4).

Mahatma Gandhi harnessed the temperance aspirations of the middle class into mass movements against drinking as a symbol of colonial oppression. He believed that India should be ritually pure and demanded complete prohibition of the consumption of alcohol. After independence, every state of India was given the rights to make their own rules regarding ban or to allow sales of alcohol. The Indian Constitution incorporated prohibition among the "directive

principles of State policy". Article 47 of the Constitution of India states that "the State shall endeavor to bring about prohibition of the use, except for medicinal purposes of intoxicating drinks and of drugs which are injurious to health".

However, during the 67 years since independence, the political commitment to implement prohibition either partially or completely has fluctuated widely in different states, and today it is almost nonexistent. During the past few years, the liquor policy of the governments of various states has one of the most controversial issues in the country. Revenue from the sale of beverage alcohol now contributes substantially to the state exchequers. From the early days after independence in 1947, the Government of India sought to persuade the state governments to adopt a uniform prohibition policy. Many states, including Madras and Bombay (the present states of Tamil Nadu, Maharashtra and Gujarat) introduced prohibition during the period 1948 to 1950.

The Planning Commission of the Government of India (GoI) set up a Prohibition Enquiry Committee in 1954 to prepare a programme on prohibition during India's second five-year plan and set April 1958 as the target date for achieving this goal. However, only a few states adopted prohibition either completely or partially. In



many states, loss of revenue and extra cost of prohibition enforcement were major reasons for non-implementation of prohibition. During the following years, the prohibition policy of the government of India suffered a number of setbacks. In order to promote prohibition, the GoI offered to compensate the state governments to the tune of fifty percent of their loss in excise revenue resulting from the introduction of prohibition. However, there were no takers for this offer. Many states that introduced the prohibition again became wet, as they could not tolerate the loss of revenue. The GoI appointed another committee, popularly referred to as Tek chand Committee in 1964 to submit fresh proposals for prohibition. Although the committee prepared a comprehensive report and made excellent recommendations, most of the states did not follow them up.

Alcohol has been one of the biggest social problems. According to the World Health Organisation, in many under developed countries 1-10% of population can be classified as alcoholics or heavy drinkers. Cirrhosis of liver has been major cause of death in many nations. It is estimated that alcohol consumption in India was growing at a steady 15 percent a year. There is growing concern in various quarters at the increase in alcohol consumption and the consequent alcohol-related problems in different parts of the country. Now, more than ever before, there is a need for a comprehensive national policy, which will not only be sensitive to the socio-cultural



realities and the history of drinking practices in the country, but will also take into account various legitimate interests. Of course, such a policy will have to be painstakingly developed and promoted.

Today in India, the tendency to alcohol consumption has percolated down to the youth. The media has played a leading role in encouraging the use of alcohol among youth by such means as the portrayal of drinking in congenial social

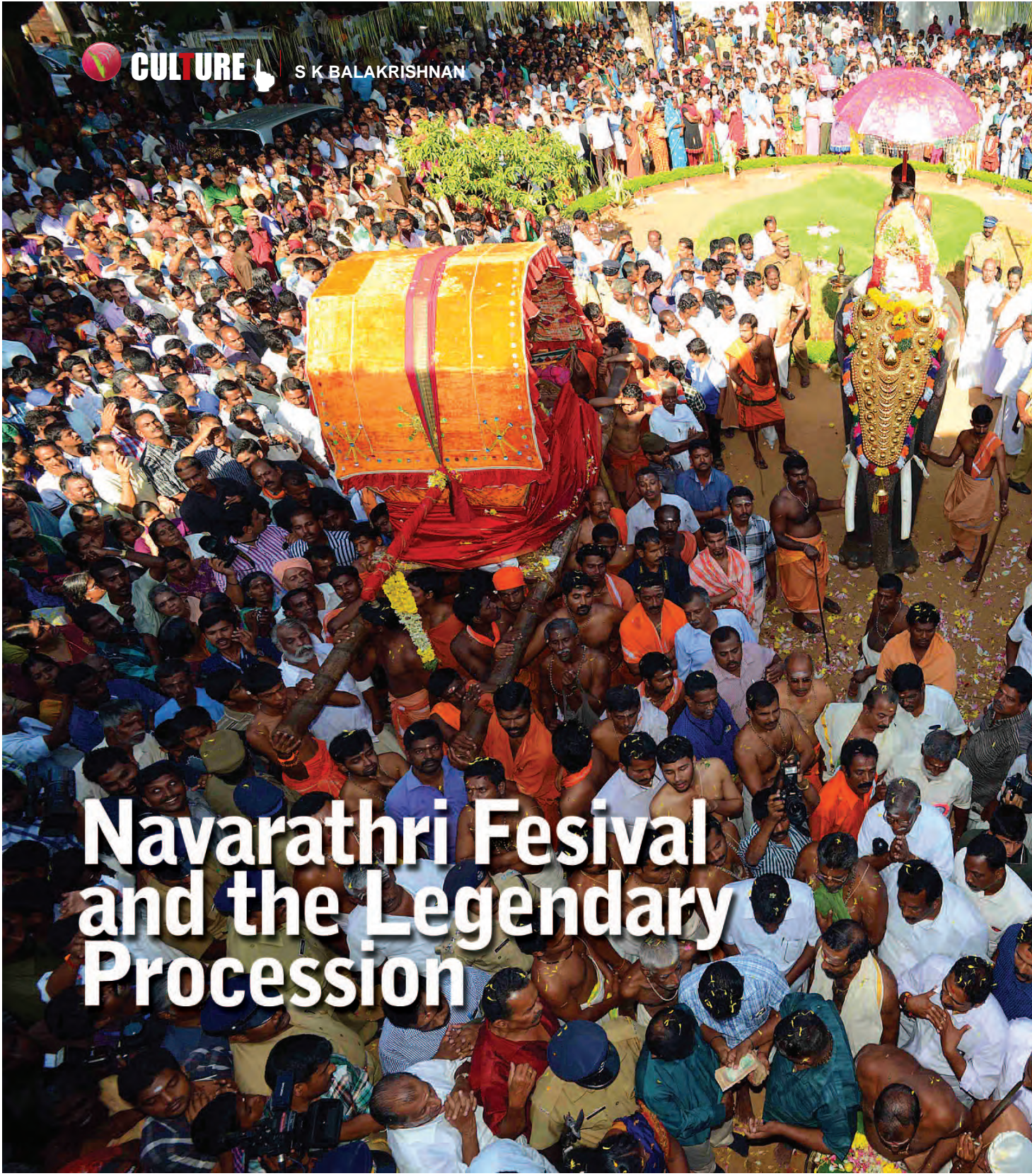
settings, by associating the habit with glamour and celebrity status, and by direct and indirect advertising. Over the years, the age at which youngsters begin to consume liquor has come down in Kerala. In 1986 the age was 19, by 1990 it had dropped to 17, and by 2014 the age was 14.

The statutory warnings and advices have never gone right into their minds. "Drink makes a man forget himself. He ceases to be a man for the time being. He becomes less

than a beast". And these words of Gandhi are painfully felt by the good-hearted souls and some social organizations and that transformed into a positive energy to abolish this social evil, but they could not beat the power play and money clout behind it. All they could do is to crave for the light in the darkened livings of the poor. The state need not have to do this for millions of people who lost their lives and values, and who still have not liberated themselves from the clutches of liquor on their own.

Mahatma Gandhi's ideas and principles have never ceased to inspire the world. "Be the change that you want to see in the world", he said and lived by those words. Now, on his birth anniversary, let's go beyond what the world knows about him. ■

The writer is Public Relations Officer to Finance Minister of Kerala



Navarathri Festival and the Legendary Procession



According to the legend, the Saraswathy Vighraha, which is brought to Thiruvananthapuram from Padmanabhapuram Palace was owned by the great Tamil poet Kamba.

Facts of history and legends are reflected in the customs and celebrations conducted regularly in temples, which are interesting, and knowledge imparting of the past. One such custom is the bringing in and taking back of the Saraswathi idol from Padmanabhapuram palace to



Padmanabhaswami temple Thiruvananthapuram, as part of Navarathri festival.

The Saraswathi idol is brought from Padmanabhapuram palace with such a pomp and glory to Thiruvananthapuram along with MUNNURITHA THANGAI idol from Sucheendram and Muruga idol from Kumarakovil. All these idols first kept at the Vishnu temple, Thackalay and from there it is brought to Thiruvananthapuram.

The Saraswathi Vighraha is brought on elephant's back, MUNNURITHA THANGAI Vighraha on Palanquin and Muruga Vighraha on a big silver horse. Upto the Tamilnadu border the Vighrahas are accompanied by Tamilnadu state police and from there by Kerala State Police. En route to Trivandrum all the three Vighrahas are kept at Avadiamman temple at Karamana in the outskirts of Trivandrum. The procession takes three days to reach Trivandrum from Tamil Nadu.

All the three idols are brought in a pageantry to





King Marthanda Varma surrendered his kingdom to Sri Padmanabha Swamy and was ruling the country as Padmanabha Dasa. As the token of the surrender he kept his sword (UDAVAL) in a room atop the

UPPIRIKKA MALIKA in the building complex of Padmanabhapuram Palace.

- Thiruvananthapuram with caparisoned elephants and accompanied by Armed Police, Police Band, Cavalry, Panchavadyam and with the usual temple orchestra, nagaswaram and thahil which imparts devotional (Bakthi) atmosphere. The procession is received at the city entrance by the head of the royal family of erstwhile Travancore-Cochin Kingdom and members of Travancore Cochin Devaswom Board and State Ministers.
- Home Minister Ramesh Chennithala accepted the ceremonial sword at the Padmanabhapuram Palace in Tamil

Nadu as part of this year's Navaratri celebrations. The State Archaeology Director handed the sword to the Minister in the presence of Union Minister Pon Radhakrishnan, Health Minister V S Sivakumar and Cultural Affairs Minister K C Joseph.

The sword of King Marthanda Varma

King Marthanda Varma surrendered his kingdom to Sri Padmanabha Swamy and was ruling the country as Padmanabha Dasa. As the token of the surrender he kept his sword (UDAVAL) in a room atop





the UPPIRIKKA MALIKA in the building complex of Padmanabhapuram Palace. Poojas are performed in the room every day. The belief is that Sri Padmanabha is ruling from there.

The Sword (UDAVAL) is taken from the Uppirikka Malika and entrusted to an authorised person who carries the sword in front of the Navarathri procession. The Saraswathy Vighraha and the sword are received by the members of the erstwhile Travancore Royal family in Thiruvananthapuram and kept at Navarathri Mandapam. Poojas are performed during the Nine days of Navarathri festivals. The Saraswathy Vighraha and the sword are taken back to Padmanabhapuram palace after the Nine days. Navarathri Poojas were originally performed at Padmanabhapuram palace. It was King Dharma Raja, who arranged Navarathri festivals to be performed in Thiruvananthapuram and the festivals became full

fledged during the period of King Bala Rama Varma.,

The Legend of Saraswathy Vighraha

According to the legend, the Saraswathy Vighraha, which is brought to Thiruvananthapuram from Padmanabhapuram Palace was owned by the great Tamil poet Kamba. He wrote the Tamil version of the epic Ramayana, which is a great work in Tamil language. The salient feature of his work is that it is full of picturesque description. He was the court poet of the then Chola King. It so happened that Kamba's Son Amaravathy and the King's daughter Ambikavathy fell in love with each other. The enraged King executed Amaravathy by burying him up to the neck in the sandy beaches of Cauvery River and by trodding his head by an elephant.

Grief stricken poet Kamba left the Chola Kingdom incognito. He took along with him his dear Saraswathy Vighraha and reached Valliyoor in search of some job. The King of Valliyoor gave him a job of giving pan to the king while he had discussions with the poets.



One day the subject of discussion was about Kamba Ramayana, and Kamba pointed out some defects during the discussion. Where upon the King came to know that the servant who is giving pan to him is the original poet Kamba.

When his identity was revealed Kamba left Valliyoor incognito, leaving his dear Saraswathy Vighraha at the palace of the King of Valliyoor. The King of Valliyoor regularly worshipped the Vighraha. Vaduvan's army attacked Valliyoor and the King was

forced to leave Valliyoor. He reached the kingdom of Kalkulam bringing the idol with him. After that, the idol is with Kalkulam Kings. Thereafter, King Marthanda Varma shifted his headquarters from Kalkulam to Padmanabhapuram Palace. The Saraswathy Vighraha of Kamba was brought there and still kept at Padmanabhapuram Palace. The idol is typical of the Thanjavur cult, denoting its origin to the Chola Kingdom. ■

The writer is a Freelancer



PhotoFeature
Onam Week Celebrations
Photographs by I&PRD







Kerala Travel Mart

Promoting Kerala tourism

Travel Mart is a gathering place for tourism professionals and stakeholders through whom they can establish lines of action, strategies and business alliances to energize and consolidate the tourism business, innovating to answer the changing demands of the market. Kerala Travel Mart (KTM) is the biennial event that showcases Kerala tourism known as Asia's new age destination and India's lone tourism super brand. Launched in the year 2000 as KTM, eight very successful marts were conducted over the last fourteen years with the participation of buyers from around fifty countries and from other parts of India. Each mart sees about thousand selected buyers who come into face to face contact with around three hundred sellers.

KTM is the only tourism event in the sub continent that brings together the business fraternity and entrepreneurs behind the tourism products and services of Kerala. It is undoubtedly the largest gathering designed, planned and

KTM is the only tourism event held in the sub-continent that exclusively showcases the products of Kerala tourism and brings together the tourism and hospitality business fraternity and entrepreneurs. Kerala Travel Mart was launched in the year 2000 and successful events followed in 2002, 2004, 2006, 2008, 2010, 2012, 2014 and the interest in the event had grown over the years. KTM – 2014 was the eight edition of this biennial tourism event.



scheduled to facilitate meetings involving buyers, sellers, media, government agencies and others. Besides seminars, press meets, post mart FAM (familiarization) tours and cultural evenings, it gives the participant a first-hand and authentic information and experience about the destinations, tourism products and service providers of Kerala Tourism. The 8th edition of Kerala travel mart was held at Samudrika convention centre, Wellington Island from 18th to 20th September 2014.

Objectives of KTM

The Kerala Travel Mart Society is a permanent institution constituted and registered as a Society under the Travancore – Cochin Literary, Scientific and Charitable Societies Registration Act of 1995. The major objectives of KTM are to promote the interest of all stakeholders engaged in activities connected with tourism and hospitality business in the state and to undertake a joint tourism promotional effort by conducting exhibitions. The Society has as its objectives to conduct the Travel Mart in particular

during every two years and to become a mechanism for an effective and continuous public/private partnership to facilitate the promotion of tourism in Kerala. The KTM society has been encouraging small players to grow further and this is evident from the increase in participation of them in each edition of the mart.

KTM – “A seller’s buyer’s mart”

The major categories of sellers participating in the mart are –Travel Agents, Tour Operators, Amusement Parks, Adventure Tour Operators, House boat operators, Ayurveda centers, Eco-Tour operators, Hotels, Resorts, Convention centers, Farm stays, Home stays, Specialty Hospitals, Museums, Medical Tour operators, Tourism educational institutions, Travel Magazine Publishers, Event management companies – Wedding, Honeymoon & MICE etc. For a buyer KTM enables ease of access to Kerala’s innovative and diverse tourism products and services and clarifies all the doubts and secure good business deals offering discounts. What is perhaps more





Kerala needs planned tourism development, measures for protecting nature and its resources should be given the prime focus. The Clean Kerala initiative has attracted many foreigners and the potentials for eco-tourism are massive in the state. Kerala has potentials for promoting all forms of tourism and even different climatic conditions should be used effectively to promote and enhance better tourism business in the state – Janin Renaud, Tour consultant from France

attracting buyers from other countries like Brazil, Argentina Australia, Scandinavian countries, Gulf countries, South Africa, Malaysia, Thailand, Singapore and Middle East also. UK, Spain, Germany, France and Russia top the list with around 25 to 30 buyers from each country. Buyers also had the opportunity of going on Pre & Post Mart FAM (familiarization) tours.

Each edition - Specific theme

important is the opportunity that one will get to interact face to face and do business with an unmatched range of sellers and the entrepreneurs behind them. The response of the buyers and sellers has been awesome after every mart

and there are possibilities of very good interactions among buyers and sellers which will lead to increased business in the tourism industry. Besides focusing on traditional buyers from European countries, USA & Canada the mart is

The eighth edition gives prime importance for showcasing the wedding tourism potentials of the state. A traditional wedding hall of Kerala style is the major attraction of the mart comprising of kathir mandapam and



KTM - 2014 at a glance

Date	18th to 20th September 2014
Venue	Samudrika Convention Center, Wellington Island, Cochin
Edition	8th KTM
No of Stalls	255
No of Buyers	282 (International) 938 (Domestic)
Maximum buyers arrived from	U.K, Germany, France, Malaysia, USA
New buyers from	Singapore, Poland, Rumania, Chez Republic, Brazil
Buyers from how many countries participated	45
Unique Stalls & Products	1. Muddy Boots (Cycle) 2. Coffee County (Traditional food and delivery practices)
Total Business Meetings	Domestic buyers - 31,000 Foreign buyers - 9000 Total = 40,000
Major Theme	Wedding Destination
Other Themes	Responsible Tourism (Village Life Experience), Spice Route Model Tourism
Needs more attention in promoting	Cruise, Ethnic Food, Adventure, Health, Medical and Eco-Tourism
Huge Demand for	Home stays
New Concept	Nat adventure
Awards Received Stalls & Exhibitor Categories	1. Sherlys Home stay, Thevara (Micro) 2. Irlandia Resorts, Mararikulam (Small) 3. Kondotty Hotels & Resorts, Thekkady (Medium) 4. Lake Palace, Aalappuzha (Large)
Ongoing & Upcoming Promising Projects & Initiatives	1. Muziris Heritage Tourism Project 2. UNESCO Spice Route Tourism Project 3. Nila Heritage Tourism Project 4. Extending successful Kumarakom Responsible Tourism Model to other regions of the state
Immediate Actions Needed	1. Cleanliness in tourist destinations 2. Visa formalities should be liberalized 3. Ensure authentic ayurvedic treatments 4. Eco-friendly motor operated house boats
Seminars held (Topics)	1. Muziris Heritage Tourism Project & its potentials 2. Ayurveda and its significance in tourism 3. Kerala Tourism - The way ahead (Potentials) 4. Responsible tourism in Kerala
Major suggestion	Sound policy needed for the sustainable growth of tourism prepared by both central and state governments

illumination. Besides this the mart showcased the miniature model of spice route in the main entrance of the venue. Kerala is having relations with thirty one countries as part of the spice trade over 2,000 years ago. Kerala Tourism department is planning to implement the spice route model in co-operation with UNESCO named "Rediscover the spice route". The stall of department of tourism clearly reveals the history of the state in its setting. The Kerala tourism departments stall displayed village

oriented and community based tourism products. Village Life Experience (VLE) as part of responsible tourism showcased traditional village tools properly in front of the global buyers which got good appreciation. The new destinations familiarized in the mart are Bekal, Cheruthuruthy/Nila, Athirapilly and Cherai.

Appropriate Timing

The timing of the mart was ideal and it takes place ahead of the peak tourist season and is expected to help the

tourism stakeholders to prepare themselves for the season ahead at a time when the state is facing severe competition from traditional rivals such as Goa and Rajasthan and from neighboring states like Karnataka and Tamil Nadu. Another major competitor for Kerala is Sri Lanka, which has started a campaign to lure the premium traveler to the island nation. For the domestic tourists also Sri Lanka has emerged as a bargain destination. Even Malaysia, Thailand, Nepal and Singapore are not far behind in their efforts to attract the discerning tourists.

Tourism was declared as an industry in the state during the year 1986 and for many years few stakeholders took interest in tourism seriously. But things have changed a lot now as a result of effective participation and vision from the part of government offering good support to the tourism stakeholders. No other state have such beautiful hill stations located so close to the beaches, lakes, backwaters, wildlife sanctuaries and waterfalls offering a unique and memorable experience to the visitors. Beyond this, there is also a symbiotic relationship between many religious faiths and ethnic groups in the state.

Goa, Uttar Pradesh and Rajasthan are traditionally popular tourist destinations but they are not sure how and when Kerala exceed them. Through KTM, Kerala has shown in front of other states and prominent tourism countries that it can market its own, unique tourism attractions, other products and services effectively. The sellers of Kerala's tourism products claimed that they did more than the expected business in this edition of KTM with confirmed buyers from India and abroad. KTM truly demonstrated the spirit of entrepreneurship of Kerala's tourism stakeholders where even the smallest tourism stakeholder could meet the biggest participating buyer in the mart.

Finally to conclude Kerala is in fact the wonder of Indian tourism and we can expect that it will advance its image in the upcoming days through the launch of more innovative products, unique marketing strategies, market focused promotional campaigns and eco-friendly practices. ■

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With the world population predicted to cross eight billion by 2025, the most crucial problem facing the world is hunger, undernourishment and chronic malnutrition. As per the Food and Agricultural Organization (FAO), hunger refers to lack of food, and undernourishment refers to consumption of food with fewer than 1800 kilocalories a day, the minimum calories required to live a healthy and productive life. Actually, the meaning of undernutrition goes beyond calorific value of food and denotes the consumption of food materials deficient in energy, proteins, essential vitamins and minerals.

It results from intake of inadequate amounts of food and low quality food, or from insufficient utilization of nutrients in the body due to illnesses, or a combination of all these. Undernutrition may emanate from household food insecurity, inadequate maternal health or childcare practices or inadequate access to health services, safe drinking water and proper sanitation. At the other end, some people are exposed to over nutrition in which case, they consume too many calories than required, or take unbalanced diets with or without low intake of micronutrient-rich foods. The term malnutrition or defective nourishment comprises both undernutrition and overnutrition.

Around the world, nearly one billion people or one out of eight individuals goes to bed hungry every night and an astonishing 868 millions are undernourished or malnourished as per rough estimates. Among those who are deprived of a healthy diet, children are the most affected, as chronic hunger throws them to severe starvation and to death by diarrhoea, pneumonia, malaria etc. Five children around the world die every minute because of chronic malnutrition, according to a 2012 report which also revealed that globally one in four children is malnourished and almost half a billion children are at risk of permanent damage



Think before you Eat



Around the world, nearly one billion people or one out of eight individuals goes to bed hungry every night and an astonishing 868 millions are undernourished or malnourished as per rough estimates. Among those who are deprived of a healthy diet, children are the most affected, as chronic hunger throws them to severe starvation and to death by diarrhoea, pneumonia, malaria etc.



to their brains and bodies over the next 15 years. As per a report from Save the Children International, the deaths of two million children each year could be prevented if malnutrition were better addressed. The report continues saying that 450 million children will be affected by 2025 unless otherwise proper immediate action is not taken to reduce chronic malnutrition.

Global Hunger Index

The Global Hunger Index (GHI) was first published in 2006, jointly by International Food Policy Research Institute (IFPRI) and the German non-profit NGO Welthungerhilfe. It offers its services to promote human rights, sustainable development, food security and the preservation of the environment, in different countries in Asia, Africa and Latin America now. In 2007, Concern Worldwide, the Irish NGO joined the group as co-publisher and since then the three are publishing it annually. Besides the yearly GHI, in 2008 they published Hunger Index for Indian States and in 2009, the Sub-National Hunger Index for Ethiopia.

Aiming at hunger reduction globally, GHI measures the progresses and failures of nations in addressing hunger and it is calculated every year by tracking hunger by country and by region. Countries are ranked on a 100-point scale with zero at the base indicating no hunger, up to 100 at the other end indicating the worse situation of total hunger. This means that higher the score in the scale, greater the hunger problem in the country and vice versa. However, in practice, neither of these extremes exist.

To rank the world nations on hunger basis, three equally weighted parameters like undernourishment, child underweight and child mortality are considered to encompass the multidimensional nature of hunger. Undernourishment is assessed by considering the entire individuals in a population while the other two considers only children below five years of age. Undernourishment is expressed as the



Undernourishment is assessed by considering the entire individuals in a population while the other two considers only children below five years of age. Undernourishment is expressed as the percentage of individuals with insufficient calorie intake.

percentage of individuals with insufficient calorie intake. Child underweight is measured and expressed as the percentage of hungry children, experiencing low weight for age reflecting acute malnutrition, stunted growth or both, and child mortality as the mortality rate among children with inadequate dietary intake and unhealthy living surroundings. In the hunger scale, a value less than 4.9 reflects a low hunger situation, values from 5 to 9.9 reflect moderate hunger, 10-19.9 indicate a serious situation, 20-29.9 is alarming, and values exceeding 30 indicate extremely alarming hunger problem.

Last few decades have witnessed marked reduction in global hunger but still twenty countries have levels of hunger that are 'extremely alarming' or 'alarming'. Climate change, global warming, pollution, demographic changes and poor policies are worsening the shortage of natural resources like land, water and energy for production of sufficient food. Most of the countries

with alarming GHI scores are in Sub-Saharan Africa and South Asia. Burundi and Eritrea in Sub-Saharan Africa and Haiti in the Caribbean are the three countries with extremely alarming 2012 GHI scores, with Burundi the worst affected. More than 50% of the population is undernourished in these countries. As per 2012 GHI, Burundi ranks 79, Eritrea 78 and Haiti 77.

As with India, 19% of the citizens are undernourished as per the 2012 Global Hunger Index (GHI), 43.5% of children below five years of age are underweight and there is 6.3% child mortality. This statistics means that nearly 3000 children die every day out of illnesses due to undernutrition. India ranks 65 as per GHI and its hunger status is in the 'alarming' category along with Nepal, Bangladesh, Madagaskar and many African countries.

Food and Agricultural Organization (FAO)

With its world headquarters located in Rome, the FAO is a unique agency of

the UN that is committed to take efforts to defeat global hunger. Complying with its motto *fiat panis* which means 'let there be bread', it gives its services to all nations both developed and developing, in lifting nutritional levels of people by improving agricultural productivity and by giving assistance to implement appropriate technology for food production and management. It focuses primarily on improving the lives of rural folk and provides assistance during famine situations. It is also a source of knowledge and information for developing countries to implement improvements in the field of agriculture, forestry and fisheries that would ensure food security for all. Its symbol consisting of a circle with a graphical image of an earhead of wheat in between the letters F, A and O and the motto 'FIAT PANIS' written below, is most appropriate in highlighting its goal. Currently, FAO has 194 member states, one member organization- the European Union and two associate members- Faroe Islands and Tokelau.



World Food Day

World Food Day (WFD) is observed on 16th October every year to mark the beginning of Food and Agricultural Organization (FAO) by the United Nations on Oct.16, 1945. World Food Day was first observed in 1981 after ratification of the decision of the 20th session of FAO as to this by the UN General Assembly. It has since been observed every year in more than 150 countries around the world, raising awareness on poverty, hunger and malnutrition. World Food Day offers the opportunity to strengthen national and international solidarity in the struggle against hunger, malnutrition and poverty. Many events are organized on and around this day to raise awareness on problems related to food supply and distribution, and to raise funds to support projects for the cultivation and distribution of food. Other UN organizations like World Food Programme, the world's largest humanitarian organization addressing hunger, and various Universities and NGOs around the world organize seminars, symposia, conferences, discussions, workshops and presentations of particular issues on food production, distribution and security. Fundraising events include sponsored sports events, charity auctions, concerts

and marches.

Every year, to put more emphasis on particular issues related to food security and to have harmony in global efforts, a theme is selected for WFD observance. This is usually announced at the beginning of every year by the FAO. This year's theme is 'Sustainable Food Systems for Food Security and Nutrition'.

Surely, we do not have sufficient cultivable lands as we had earlier produce food for the ever increasing human population. In addition, there exist inequalities in access to available food resources the world over. Phenomena like global warming, greenhouse effect and unsustainable developments, along with the heavy release of pollutants continue to degrade our environment and ecosystems, threatening biodiversity, which is essential for the supply of food. As is evident, before it reaches the consumers, the food is a part of the environment, grown by the rural folk mostly. Every step in the food production, starting from the growing field to the market influences the final availability, quality and accessibility of food.

To address food security, it is necessary to have a sustainable food system, which defines itself as a collaborative network that integrates several components like production, processing, distribution, access,

consumption and recovery of food waste, in order to enhance a community's environmental, economic and social well-being. Integrated action and complementary interventions in the different components of the food system like food crop cultivation, resource management etc. are required to address malnutrition. Sustainable agriculture, reduction of food wastage and equitable distribution of resources can alleviate world hunger to a large extent.

According to the FAO, every year 1.3 billion tonnes of food, coming to a third of global food production is wasted or lost, which is equivalent to the amount produced in the whole of the hunger prone sub-Saharan Africa. Food waste is an enormous drain on natural resources and a contributor to negative environmental impacts. If properly planned and managed, food produced in the world can feed the entire human race. In this context, recollect the theme of World Environment Day 2013- Think, Eat, Save. It was an anti-food waste and food loss slogan selected to encourage people to reduce your foodprint to save the environment. It is equally good a slogan for the World Food Day as well. Think before you eat and help save the starving millions. ■

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We are witnessing the frantic search for germplasm of exotic cattle breeds with high production potentials. Instead, a genetic engineering process to tap the potentials and the disease resistance capabilities of the desi cattle breeds is the need of the hour.

Cattle rearing is one of the proud heritages of ancient India. It was the livelihood of millions throughout India and a natural supporting system to the agricultural production. Cows were synonymous with sanctity and prosperity. Milk is the best balanced food and helps million in healthcare. People considered splashing of water tinged with cow dung after cleaning of house holds to bring back the freshness. The 'Panchagavyam' is a mixture of milk, curd, ghee, cow urine and cow dung. Every part of this animal such as hide, bones, hooves, and horns were used for various needs of man. Yes, cow was considered as the 'Kama Dhenu'.

The diversity of India can be spotted on the array of cattle also. All are best suited for the people, places and climate of India. Though the cows may be different in colour, shape and size, the colour and properties of the milk remains the same. The cows around the world are mostly known by their origin lands such

as Jersey, Swiss Brown, Vechur, Sindhi, etc. India is now the higher producer of milk. Since ancient times, India topped in the number of cattle and of the breeds. The National Dairy Research Institute has documented more than fifty cattle breeds in India.

Cows from Vechur, a small village near Kottayam could be considered as the own cattle breed of Kerala. The small size, low body weight, lesser-feed intake etc. are the characteristics of this breed. Milk, though the quantity of production is low, is rich in nutritional value. Small curved horns, fine and flowing skin and stout legs are also some of the specialties of this desi breed. It is unfortunate to say that this breed is now on the verge of extinction after decades of natural and cross breeding. Though late, animals of this breed are conserved by Dr. Sosamma Iype and her colleagues of Kerala Agricultural University. The conservation efforts are going on.

'Kapila' is another rare desi cattle breed maintained by the 'Thulu Brahmin' people of South Canara region. They believe that the prosperity of their home will go forever once the 'Kapila' cow is sold out. According to the legends, 'Kapila cow' was born out of the prayers of Kapila Maharshi. The term 'Kapila' represents the blend of light yellow and ash colours. The calm and friendly cattle are also called

'Kapila' in Malayalam. Small head, short horns, low feed intake and highly nutritious milk are its specialties. Though the merits are laudable, this breed is not given its due recognition by the scientific community. Other notable desi cattle breeds of the Karnataka region are 'Amrutmahal' from Chikmagalur, 'Hallikkar' of Mysore, 'Krishna' of Krishnavalli, 'Javari' and 'Killari' of Bijapur.

The 'Kankayam' cattle breed of Coimbatore are work animals. The well-known desi cattle breeds of India are 'Abalacherry' of Thanchavur, 'Barador' of Erode, 'Aalampadi' of Salem, 'Red Kanthari' of Kanthar (Maharashtra), 'Gwala' of Vidharbha, 'Dangi' and 'Divani' of Nasik, 'Kankrej', 'Raathi', 'Nagori' and 'Mevatti' of Rajasthan, and the 'Tharparkar' of the Deccans. The list of desi cattle breeds of Indian region also includes 'Haryana' of Haryana-Hissar, 'Gir' of Gujarat, 'Gangotri' and 'Bachor' of Bihar, 'Gwalior' and 'Malwi' of Madhya Pradesh, 'Nimare' of Nimore, 'Kenkathe (Kenvarya)' of Uttar Pradesh, 'Kriga' of Sikkim, 'Ponwar' of Himalayan belt, and the 'Red Sindhi' and 'Sahiwal' of Karachi.

The robust and stout legs, heat resistant skin and the perfectly balanced body shape of the desi cattle ('Ongole', 'Dhoni') were the prime reasons for their induction into the war zones along with

Nava Suna

need

the elephants and horses by the Indian Kings. The desi cattle breeds such as 'Sindhi', 'Kankrej' and 'Sahiwal' were taken back to Brazil in earlier times along with the trade of cashew and spices. They have taken the desi buffalo breeds as 'Murrah', and 'Mehsana'.

The desi cattle breeds are blessed with their inherent abilities to resist the climatic variations and diseases. The unique fat globules of the milk from 'Kapila' and 'Vechur' are said to have positive medical traits and cholesterol lowering properties. The desi breeds could digest almost everything from the agricultural byproducts and leftovers easily. Hence rearing them is more economical. The local feeds with high proteins naturally attribute to more protein in their milk too. The only deficits often raised of the desi cattle breeds are the low milk production, high age of maturity, and the long inter-calving period.

The majority farmers of Kerala often maintain only a single cow in their households. And this system is limiting the possibilities of the 'Intensive Selection Process'. The principle behind the intensive selection process is to select any top ten milk producers from among the hundred milch cattle and to, further select ten toppers from among the hundred cattle of their next generation. This ongoing system of selecting the best is the uniqueness of the Intensive selection process.

The KLD Board should be able to procure the advances in genetic engineering of the foreign countries and to pass them to the dairy farmers. Many of the foreign countries have reached the stage of micro manipulation, sexing, and splitting of embryos, animal cloning and even gene transfers.

The 'Nava Sunandini' should be the product of the high milk producing potentials of the exotic breeds and the

disease resistance and feed conversion capabilities of the desi cattle breeds. Hitech management practices and high nutrient feeding alone will not yield positive results if we are opting for the economical milk production. Even man cannot find enough food in the present times. It's high time the people at the helm of affairs review the decision to opt for the pure exotic cattle breeds with heavy body weight, high maintenance costs and poor disease resistance. Though the Hitech or some of the mini dairy may afford to maintain such breeds. It's sure that the common farmer will not get benefited. What we need now is, one 'Nava Sunandini' with capabilities to withstand the climatic fluctuations and will produce reasonable quantity of milk under the present day limited physical conditions. ■

The writer is founder Chairman, MILMA

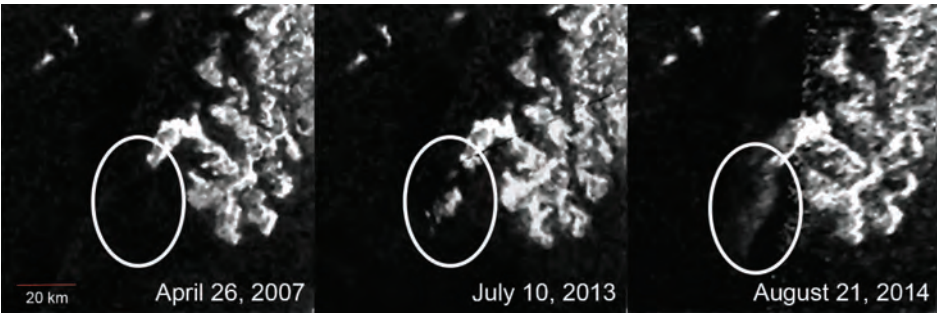


andini

of the hour



Titan Mystery Visualised



NASA's Cassini spacecraft is monitoring the evolution of a mysterious feature in a large hydrocarbon sea on Saturn's moon Titan. The feature covers an area of about 260 square kilometers in Ligeia Mare, one of the largest seas on Titan. It has now been observed twice by Cassini's radar experiment, but its appearance changed between the two visions.

The feature, which appears bright in radar images against the dark background of the liquid sea, was first spotted during Cassini's July

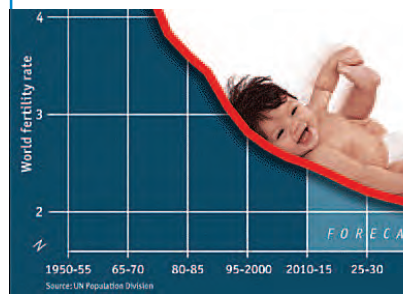
2013 Titan flyby. Previous observations showed no sign of bright features in that part of Ligeia Mare. Scientists were perplexed to find the feature had vanished when they looked again, over several months, with low-resolution radar and Cassini's infrared imager. This led some team members to suggest it might have been a transient feature. But during Cassini's flyby on August 21, 2014, the feature was again visible, and its appearance had changed during the 11

months since it was last seen.

Scientists on the radar team are confident that the feature is not an artifact, or flaw, in their data, which would have been one of the simplest explanations. The team has suggested the feature could be surface waves, rising bubbles, floating solids, solids suspended just below the surface, or perhaps something more exotic. We will have to wait and see the future excavations of Cassini.

Recessions Result in Lower Birth Rates

A new research from Princeton University's Woodrow Wilson School of Public and International Affairs shows that recessions result in lower birth rates both in the long and short run. The researchers find that women in their early 20s during the Great Recession are likely to have fewer children in both the short and long term. This result



Protein Influences Heart Failure

In a new study published in Proceedings of the National Academy of Sciences, researchers explained how the function of a key protein in the heart changes in heart failure. Heart disease is the number-one killer in the developed world. The molecular structure of the heart muscle changes as heart failure progresses, though scientists cannot always agree on what changes are good or bad. One change that occurs is an increase in "calcium sensitivity".

Calcium ions are pumped in and out of the muscle cell with each heartbeat, turning contractions on and off. Since 1976 medical researchers have known that the heart regulates its calcium sensitivity by phosphorylating (adding negative phosphate groups) to a key cardiac protein called troponin I.

Scientists believe that heart continuously adjusts calcium sensitivity in order to maintain a proper balance between contraction and relaxation. Calcium sensitivity will become a central concept in cardiology. The increase in calcium sensitivity seen

in heart failure may be the heart's response to ongoing volume or pressure overload.

is driven largely by an increase in the number of women who will remain childless at age 40.

To properly understand the long-term effects of high unemployment rates on fertility, women must be followed over time. The researchers divided the women into groups based on age and their own state of birth. Following groups by age allowed the researchers to analyze effects over time. And using women's own birth state allowed linkage to state-level unemployment rates as well as tracking of women who move from state to state between births.

Their calculations show that a one-percentage point increase in the unemployment rate experienced between ages 20 and 24 reduces the short-term fertility of women by six conceptions per 1,000 women. When following these women upto 40 years of age, the same unemployment rate increase leads to an overall loss of 14.2 conceptions per 1,000 women. This increasing effect over time is largely accounted for an increase in the fraction of women who remain unmarried and childless at age 40. These women not only forego first births, but forego later births as well.

New Battery to Solve Environmental Problems

Present-day lithium batteries are efficient but involve a range of resource and environmental problems. Using materials from alfalfa (Lucerne seed) and pine resin and a clever recycling strategy, Uppsala researchers have now come up with a highly interesting alternative. Lithium-ion batteries are highly promising for various products—not least, electric vehicles or large-scale energy storage in the electricity grid—in the future energy system.

However, present-day lithium batteries entail a number of resource-related and environmental problems. For a start, the world's commercially extractable lithium resources are limited and whether they can meet future needs is unclear. Moreover, it is very difficult to recover lithium from the inorganic materials used to make modern batteries.

In the latest study, the battery is based on recovery and renewable biological material with an energy content corresponding to that of current lithium-ion batteries.

Components of the battery are made of renewable organic biomaterials from alfalfa and pine resin, and can be recycled with a low energy input and non-hazardous chemicals, such as ethanol and water. The recycling and recovery strategy is a wholly new concept. Constructing a new battery from a spent one is also feasible. In other words, a straightforward process enables it to be reused.



Greenland Ice Sheet More Vulnerable

A new model developed by researchers at the University of Cambridge has shown that despite its apparent stability, the massive ice sheet covering most of Greenland is more sensitive to climate change, which would accelerate the rising

sea levels that threaten coastal communities worldwide. In addition to assessing the impact of the increasing levels of melt water created and spilled into the ocean each year as the climate continues to warm, the new model also takes into account the role that the soft, spongy ground beneath the ice sheet plays in its changing dynamics.

Currently, due to surface melting alone, it is losing ice at a net annual rate of 200 gigatonnes, equating to 0.6 millimetres of sea level rise. A similarly large, but ultimately more uncertain source of sea level rise is tied to a net annual ice loss caused by increased movement of the ice sheet, which results in more ice being discharged into the ocean.



TELLICHERRY The cradle of Indian Circus



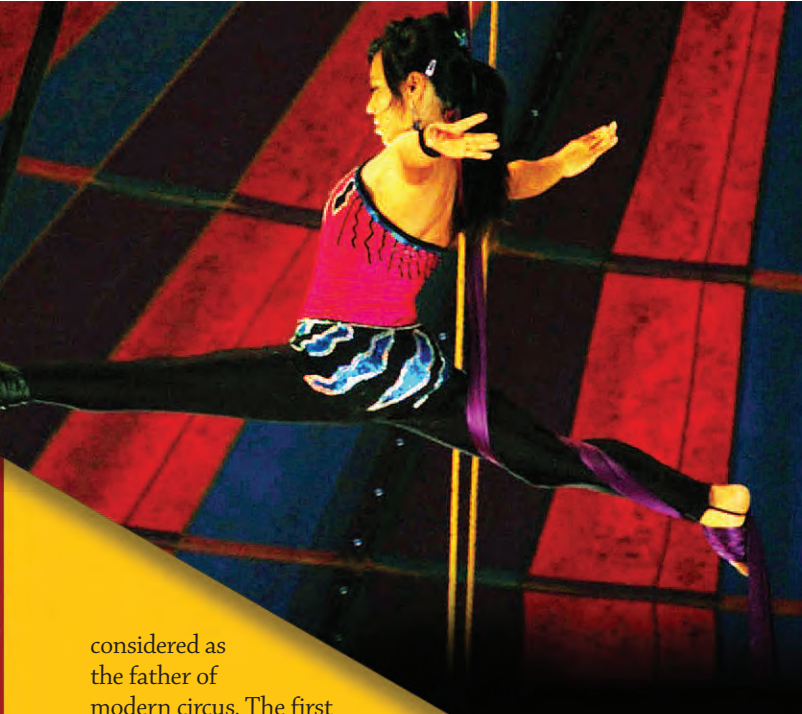
Artists flying like squirrels, catchers, hanging on the trapeze catching their comrades hands and passing them to the other in amazing speed, knife thrower throwing knife without losing his aim on the girl fastened by belt on an erected wooden board, juggler playing with accurate movements of his hands, adventurous bike drivers performing nerve wracking stunts on motor cycle in the globe, artists performing Kambakali, horizontal bar, rope walking, foot juggling, foot acrobat, weight lifting, balance on cycles, girls cycling on single rings, dazzling artists and animals, grand parades of colour pomp and

charm. This is circus, a tented show that features seductive feats of physical skills, one of the most important amusements of common man. Circus which is one of the most favourite forms of entertainment since its creation became a part of common people's life. But now it is struggling to survive and to remain afloat amidst many challenges. The most important challenge is the fading public interest. Did this entertainment still attract enough audience as it has done decades ago is a

million dollar question. Indian circus has acquired a rather unsavory reputation not in India but also abroad. Stories of children brought and forced in to bondage, training them in horrifying conditions has contributed to its decline in attendance whereas foreign circuses like Russian circus still attracts a large public

Origin of Indian Circus

An English man named Philips Astley is



considered as the father of modern circus. The first circus tent was raised by Astley in England in 1798. His "Royal Amphitheatre" became the first circus company to find a place in the annals of history. Circus had its origin in India in 1879. The first man to pitch a tent in India was Wilson Kirni, a horse rider who challenged the audience whether any body can perform acrobatics as he has done. The challenge was taken over by another horse trainer and riding master by name Vishnu Moraswer Panth Chatre who was in a charge of the horse stables of Rajah of Kurudwadi. Within a year after a course of rigorous training Chatre performed the acrobats in the same stadium as was done by his challenger who recognised his merit. Thus circus began in India out of a challenge raised by an Englishman Wilson Kirni. Chatre's eyes were already opened when he watched Royal Italian Circus in Bombay in 1874. He started Chatres' Great Indian Circus and raised the first Indian circus tent in India. Its creator is now regarded as the father of modern Indian circus.

Thus circus became the queen of popular

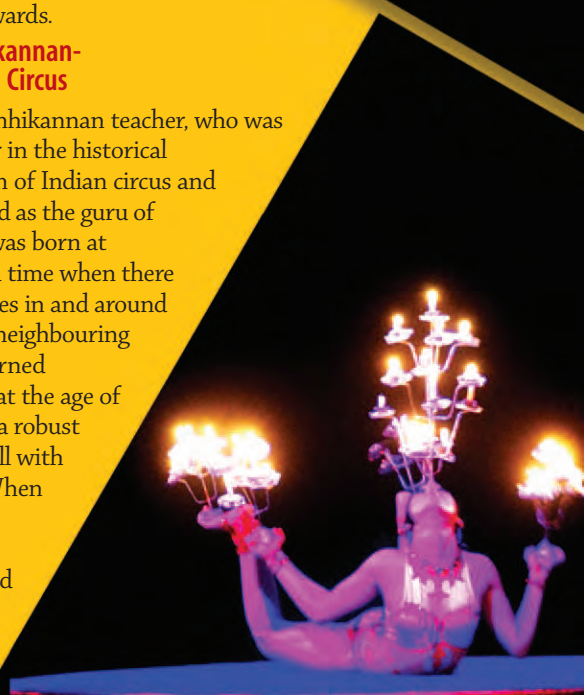
entertainments and in its best days, circus tents were pitched in the main grounds of major Indian cities and Prime minister and such other dignified personalities, Bollywood stars came to see the shows. In those glory days star artists earned sufficiently that they could even buy out a circus or start a new one. M V Shankaran of Gemini circus was once a trapeze artist. Circus rings became venue for many films. Raj Kapoor's 'Mera Naam Joker' was filmed in Gemini ring.

Indian Circus attains 135 years. Russian circus celebrated its 76th anniversary on a grand scale but the centenary of Indian circus passed away without any celebration. The 125th anniversary of Indian circus was however celebrated in Talkatora Stadium, New Delhi jointly by Indian Circus Federation and Indian Circus fans association and out of the 18 artists presented there to receive honours were Malayalees. Most of them were complaining that circus

artists who entertain the public are not being remembered and recognized in our country. Whereas artists from various fields gets recognition honour and awards.

Keeleri Kunhikannan-Guru of Indian Circus

Keeleri Kunhikannan teacher, who was the forerunner in the historical transformation of Indian circus and who is regarded as the guru of Indian circus was born at Tellicherry at a time when there were 75 Kalaries in and around the town and neighbouring villages. He learned Kalaripayattu at the age of seven. He was a robust figure like a bull with firm strides. When the British regiment in Tellicherry used to exercise on parallel bars and





horizontal bars Keeleri used to watch such shows and began practising at his home. He was an instructor of gymnasium at Basel mission school in Tellicherry. He was also a cricketer but his bowling was so fast and thus he stopped playing cricket. He was attracted towards circus when he happened to see Hippodam Circus in Madras in 1884.

Vishnu Moraswer Chand Patre who started the first circus company visited Tellicherry to pitch a tent, happened to meet Keeleri Kunhikannan who was already inspired by circus and martial arts. Meeting between Keeleri and Chatre could be seen as a pivotal point for Tellicherry

founded Raymon circus and M.V.Shankaran owner of Gemini circus were his illustrious pupils. Kannan Bombayo who conquered the circus universe by his acrobatics was also a brilliant disciple of Keeleri. Horizontal bar was the first item Keeleri had introduced. Several new items by using three horizontal bars were also introduced. M V Raman was given training in this item. Kambakali was another item he designed, by combining rope walk and other rope arts. It was performed first by Chandu Keeleri's brother in law. Other items include frog jumping, weightlifting, pole acrobat, pole on the wall, ro-man rings and ariel tapeze. This celebrated and accom-

The 125th anniversary of Indian Circus was however celebrated in Talkatora Stadium, New Delhi jointly by Indian Circus Federation and Indian Circus fans association and out of the 18 artists presented there to receive honours were malayalees.

circus. On Chatre's request to train artists for his company Keeleri agreed to do so. He immediately set up a Kalari in Pullambil in 1901 and another in Chirakkara in 1904 and began training artists for Chatre's circus. Thus Tellicherry became the recruiting ground for Indian circus. Men and women circus artists from Tellicherry came to dominate Indian circus rings. By planting the art in this soil Kerala became the cradle of circus in India. Chirakkara circus school of rarity anywhere in the world at the time gradually tasted success. His students became star performers and Maharastrians were overpowered by Tellicherry circus artists.

Prof. Kallan Gopalan who

plished trainer of circus died in 1939. His only memorial is his tomb at CSI church cemetry, Nettur, Tellicherry.

Students who trained from Keeleries Kalari began to set up circus companies and Pariyali Kannan was the first to set up a circus company in Kerala named Grand Malabar circus. Within two years it stopped its shows and the artists were in great demand. Prof. Kasinath of Chatres circus also arrived in Tellicherry to recruit artists of Malabar circus. After the inauguration of Pariyali circus in 1904, many circus companies began to sprang up. Those emanated from Keelerie's Chirakkara School were White Way, Great Raymon, Great Oriental, Gemini, Great Bombay, Great



Keeleri

dictator of Italy, American President Roosevelt, British Prime Minister Winston Churchill also recognized his merit and bestowed medals as a token of appreciation and marks of their favour. Kannan was the disciple of Keeleri Kunhikannan teacher. In those days parents of poor families, failing to put up their children send them at the early age of five to Keeleri's circus kalari with the intention to make them circus artists.

Eastern, South Indian Ladies, Jumbo, Appollo, Grand Fairy, Western, Tharabai, Royal, Herculee, Bharat and Star of India.

South Indian Ladies started by Krishnan teacher became Kamala in 1944, a three ring circus company started by Prof. Damodaran who started a humble beginning with a two pole tent in to a six pole tent. Kamala became three ring circus (same item exhibiting in three rings) in 1956 at Nagpur camp. Kamala Circus became India's first and one if it's kind in Asia and second largest in the world. Damodaran died in 1956 and ten years later his company also breathed its last.

K. M. Kunhikannan another disciple of Keeleri who merged his two companies White way and Grand lion into Great Bombay circus and later it was taken over by his nephew K.M.Balagopal in 1953. Bombay circus is now managed by his son K.M.Dilepnath.

Kannan Bombayoo Jumping Devil of India

A sobriquet bestowed by Adolf Hitler, dictator of Germany on Indian artist N.P.Kannan better known as Kannan Bombayoo. The Fuhrer had been watching this intrepid performer execute the difficult on back somersault done on a rope in mid air. When the show was over Hitler presented him this autobiography. Mussolini,

was also one among them. Keeleri found an apt pupil in Kannan. Kannan's readines to attempt difficult feats and his astonishing progress in acrobatics impressed his teacher who taught him 'kambakali'. Kannan got offers from many circus companies in India and abroad. He joined Sheshappa circus in 1916 when he was nine. Later he worked with Parasuram circus and Whiteway circus. In 1930's he toured European countries performed before European audience and hailed as a brilliant and daring performer, he played at Olympia and toured in America in Rigling Brothers and later taken over by Bertram, Barnam and Bailey's and became the first international circus star.

Kannan was sailing to Malabar after nine years of tour with his Italian wife Philomina and their child and on the way he died at sea. On hearing the sad demise of Kannan, Mussolini send a message to the captain of the ship that Kannan's body should not be buried at the sea and that his body should be handed over to his relatives in Kerala. Kannan Bombayoo was one of the circus artist who created sensation abroad.

Women in Circus

With the entry of girls the entire outlook of circus began



to change. They began performing even the difficult items. The first lady to enter Indian circus was Avadabai wife of Vishnu Moraswer Panth Chatre, father of Indian circus. Girls from Tellicherry began to enter the circus. Financial difficulties after the second war was the major driver in bringing girls to the circus rings. Kunnath Yesoda became the first women performer of Kerala circus. Maithily from Tellicherry of Grand Fairy circus was the first women to perform 'Kambakali' an item performed in those days only by men. Adventurous items like ladder balance, stunt cycle, loose wire were also performed by her. Meenakshi, Janaki, Kousu, and Jeep jumber Soumini were other early women artists who became stars of circus rings. Ladies began to take up items like cycling in groups, unicycle, stick balance, etc. Prof. Damodaran, the great



Ban on display of wild animals like lion and tiger, absence of reserve grounds in urban areas, lack of providing basic amenities for erecting tents and camping of artists and animals are some of the major obstacles on the way of circus.

showman of Indian circus who founded kamala circus was also a proficient trainer. He introduced numbers like 'table scating' spring night and trampoline'.

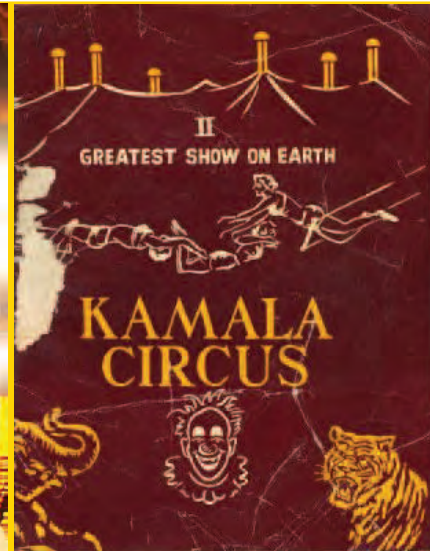
Once circus became a part of mans life, he cannot keep away from this enchanting world. When Circus Company pitches a tent in a village, they will get ready to amaze the audience with their wonderful performances. The whole village will then be in a joyous mood.

Drawbacks

But somewhere the pulse of circus began to cease.

Audience began to keep away from this highly appreciated art and the mysterious arena. Galaries became vacant. Once it was full with the roaring sound and clasp of hands. Many circus companies like Kamala, Appolo, National, New Grant, Great Oriental and Bharath withdrew from the field. Eventhough new companies emerged like Amar created by K.PHemraj, Rambo, created out of the fusion of Oriental, Victoria, Fantasy and Arena by P.T.Philip, it is found that young generations are losing interest in circus.

High risk factor, poor wage structure and lack of amenities in the camp were the reason behind. Care shown by earlier circus owners were not followed by newcomers, exploitation, and harassment became part of circus. Artists returning without any savings after years of risky job, those



returning due to injury and those bedridden after falling from the circus rings were warnings to the new generation. The socio economic condition of Malabar was also improving by 70's. Educational facilities and job opportunities increased. Flow of gulf money also kept the young generations away from circus

tents. They don't want to risk their precious lives in circus camps. On the other side the advancement in the field of multimedia, channels and such other hi-tech facilities like video games, massive multi players, Hollywood blockbusters, amusements and water parks dimmed the scope of circus. Feats of human

ingenuity seems less magical to new generation of children whose superheroes are in three dimensions and high dimensions. Today circus is a thing of the past and the parents are taking their children to the 3D screen wonders of Harry Potter and Auperman. In 1992 for the first time in India, government has

initiated a project under Sports Authority of India, Tellicherry, to train children belonging to circus families because most of the acrobats in Indian circus over the past century hailed from this part. It continued for a while but later the authorities stopped admitting children from 2000 onwards. Govt. of Kerala has recently set up a circus academy in an abandoned theatre in Tellicherry. Ban on display of wild animals like lion and tiger, absence of reserve grounds in urban areas, lack of providing basic amenities for erecting tents and camping of artists and animals are some of the major obstacles on the way of circus. Anyhow everybody should take more interest in trying to elevate the level of circus and to regain its lost sheen in Tellicherry to keep this amazing art alive forever. ■



**CRYPTANTHUS**

Stars of the Earth

A garden plant which got its nick name “Stars of the earth” due to the particular nature and pattern of its foliage is the Cryptanthus, an important genus in the group of Bromeliads. Cryptanthus bromeliads are unique that they only grow terrestrially whereas many other Bromeliads grow mounted on a substrate. The genus name Cryptanthus is from the Greek “cryptos” which means “hidden” and “anthos” meaning “flower”.

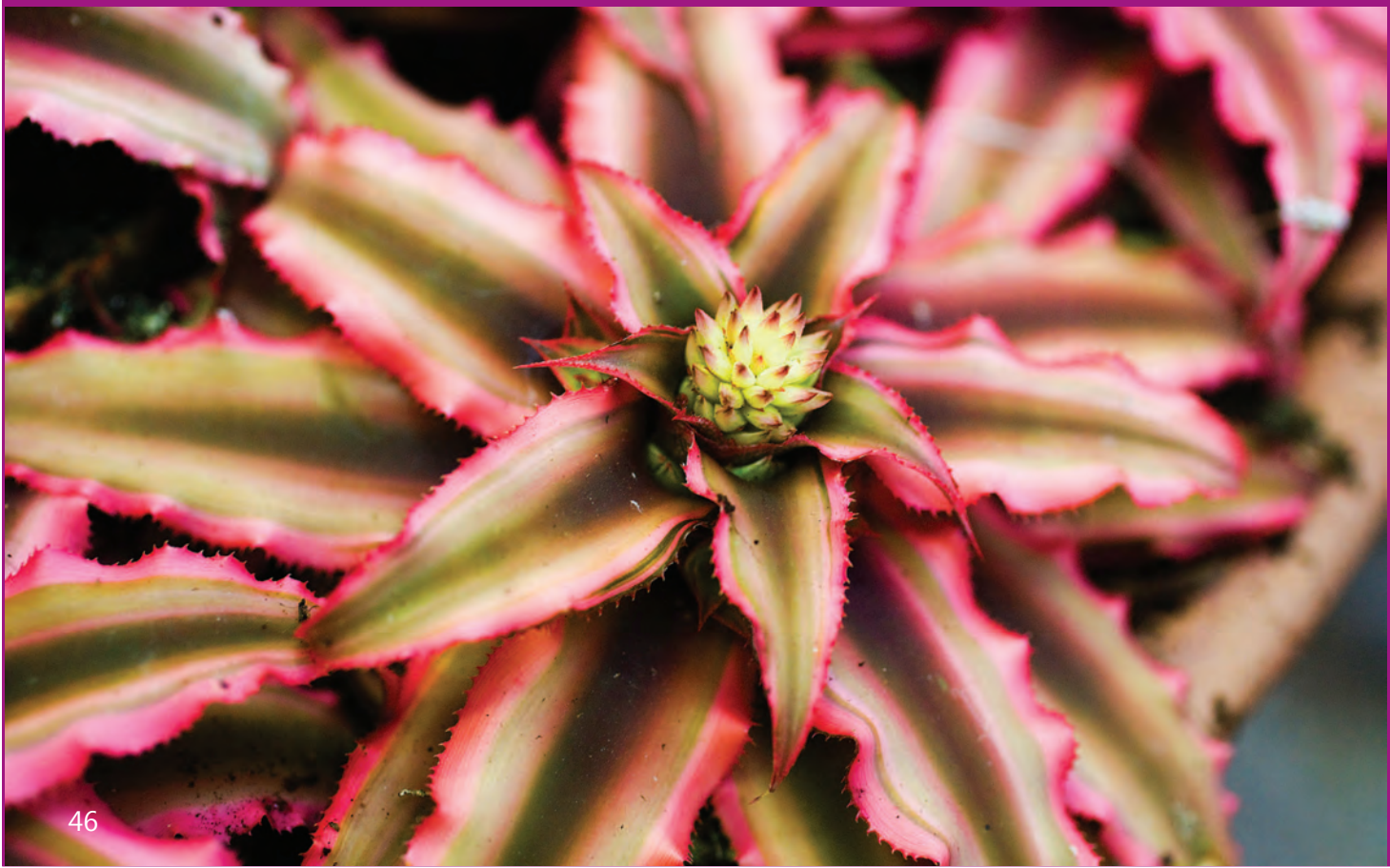
There are 50 terrestrial species, more commonly known as Earth Stars. The plant is endemic to South America more specifically in the rain forests of Brazil. Cryptanthus plants show a great variety in their foliage; their colours range from dark green to bright pink to red, maroon, chestnut and can be banded, spotted or of any other pattern. The rosettes of leaves are usually serrated with wavy margins from 3-6 inches in length, which can go up to 12 inches. They can have sharp zigzag pattern also. The narrow leaves taper to a sharp point and the lowerside is covered with scales.

The variability of shapes, colours and patterns along with their adaptability to a wide range of

growing conditions, make Cryptanthus a favourite of garden lovers across the world. As mentioned earlier they are grown widely for their bright and colourful leaves rather than for their flowers which are white and inconspicuous. The white, light green or pink flowers bloom in the centre and from between the leaves. The plants are generally dwarf, almost stemless and more or less tufted.

Cryptanthus have a well-developed root system, which grows to at least the same width as its foliage or equal to the size of the plant. The plant does not need direct sun but only bright, diffused light to bring out maximum colour in it, which means 55% -75% shade in sunny climate. If the light is too little, the wonderful colours and patterns fail to develop. At the same time too much light causes bleaching of colour and sunburn.

Patio areas lit by morning or afternoon sun and office settings with fluorescent lighting are good locations. Cryptanthus tolerates a wide range of temperature from just above freezing to over 100 degrees. Like all Bromeliads, Cryptanthus also likes good air circulation. The plant enjoys humid conditions, which may be increased in the home or



office settings. That is why Cryptanthus grow wonderfully as accent plant in a well-lighted bathroom or above the kitchen sink where humidity is generally higher.

A pot of five or six inches large can be used for its growth. It should never be under-potted since the plant develops a strong root system. The growing medium should be loose and porous rich in organic material and which retains more water but it must drain rapidly also. A mixture containing two parts soil and one part each of organic matter (either leaf mould or cow dung manure) and sand is good. Keep the potting medium moist at all times and never allow to dry it out. If kept indoors mist the foliage to provide humid conditions. No pruning is needed for the plants.

The plant is usually propagated using small plantlets or pups, which grow in the leaf axils or stolons or from base of the mother plant. When the pups are 1/3 to 1/2 size of the mother plant give them a gentle tug; if they separate easily, they are mature enough to survive on their own. Pot the pups in the same sized pot using the same type of mix that the mother was growing in.

Make a small depression, insert the pup's small stem and press the mixture firmly around it. Pot deeper than the base of the first leaf. The pups will usually root faster and they have to be stalked until they develop sufficient roots to hold itself up. So as to maximise the growth, Cryptanthus can be fertilised apart from organic foods using any balanced fertiliser mixture such 17-17-17 or 18-18-18. It is important here to dilute well the fertiliser in water before applying it in the plant basin.

There are many beautiful varieties in Cryptanthus with vast difference in appearance. Understanding the names will help you determine what a particular species of Cryptanthus look like.

- Cryptanthus bivittatus-narrow and pointed buff-coloured leaves with reddish stripes.



- Cryptanthus zonatus roseus-finely serrated and fluted leaves having stripes, pale pink buff.
- Cryptanthus tricolor-pale cream leaves coloured pink at centre and ridges, lightly marked green
- C.coriaceus-leather like leaves.
- Clatifolius-wide leaved
- C.marginatus-having margins in leaves
- Clacredae-tattered leaves
- Caurantiacus-orange coloured leaf
- C.carnosus-meat coloured leaf
- C.fuscus-dark, dusky leaves
- C.viridis-green leaves

Cryptanthus is an attractive foliage plant in pots as well as accent plant. They are excellent plants for terrariums also.



Kerala Karshakan @60



Kerala Karshakan the premier farm magazine in Malayalam is now sixty years young. Farmers and the entire community of the extension, research and development work force performing in the farm front are happy to hear that, their pretty and affectionate journal is celebrating its 'Shashtabdapurthi'. To celebrate the sixtieth year of the publication, the Government has decided to produce a 'Shashtabdapurthi' special. Minister for Agriculture K.P.Mohanan, deserve very special praise for this great initiative. Kerala Karshakan now enjoys a monthly circulation above 1.3 lakhs. Sixty years ago none could dream of such a situation. Its present stature is such that, it could find a place of pride in every Malayali farming enthusiasts home with its wide and utilitarian content.

The birth of the magazine in 1954 marked the dawn of a new communication channel giving stress to provide new hope to all those engaged in the primary development sector that is agriculture. It was a modest commencement of an information communication revolution. Perhaps the only other journal which could cross sixty

All the Agriculture Ministers in the state gave a very affectionate support to Kerala Karshakan for enhancing its utility to the farmers. Kerala Karshakan has made a galaxy of editors who rendered yeomen service for making this journal a friend, philosopher and guide to the farmers. T.K.Bhaskara Panicker, B.Remani, G.J. Wincent, Lali and now Suresh Muthukulam have done praise worthy efforts.

years in this sector is 'Indian Farming' produced by Indian Council of Agricultural Research.

During 50's we had the fortune to hear from the elders working in the agri communication front at 'Indraprastha' about the commencement of massive extension efforts in the Indian agricultural sector. They used to place all the praise for the same to Jawaharlal Nehru, the first Prime Minister of India. During the early days after attaining independence Nehruji found time to drive the Indian Agricultural Research Institute, New Delhi, with a mission to hear directly from top scientists about the methods to be adopted for making the nation self sufficient in food production. After marathon discussions, Panditji said the solution is to make available the research results to our twenty-five crore farmers and to enable them to practice the same using appropriate inputs, which marked the commencement of these efforts.

USA came forward to assist India in building up an efficient extension network. The technical co-operation mission suggested through the Government of India that all Indian states might start an agricultural information unit attached to the Department of



agriculture. As a part of the effort, in 1954 Travancore - Cochin State gave shape to the idea to start a monthly magazine to help the farmers with more knowledge on intensive agriculture. C Thomas, the then Director of Agriculture was its first Editor and was ably assisted by Venkita Subban who was then the Assistant Director of Agriculture.

C.Achutha Menon, the first Finance Minister of Kerala took a very special interest in developing farming sector, was assisted by P.D.Nair, the then Director of Agriculture. The information unit under the Department of Agriculture got a big boost with K.S.Pillai as the State Information Officer and R.T.Ravi Varma (Seeri) as the Assistant information officer. C.Achutha Menon during a discussion pointed out that, Kerala Karshakan should be published regularly every month and it must be produced like other prominent literary magazines of that time. He also sanctioned a full time editor, supporting staffs and funds to the journal for intensifying the activities.

I took the full time editor's job and prior to that, was working as an agricultural extension officer in an NES Block. The first copy of Kerala Karshakan reached the hands of farmers in October 1957 and since then its glorious saga continues. The farmers of Kerala gave a warm welcome to the magazine, in the

new format which contained good articles and valuable information needed to the farming community. The annual subscription of the new magazine was 1.44 paisa and the price per copy was 12 paisa! It is worth to mention that, the salary of the editor was rupees two hundred.

The magazine won the special attraction of the media world, when it produced a special number on the 'glyricidia' green manure campaign launched by the Department of agriculture, which won national attention. The journal carried exclusive messages from the Chief Minister and Agriculture Minister, and special articles. The magazine soon became very popular that leading daily newspapers lifted several of its contents. Its impact was evident from the steep rise in circulation over 20,000 copies.

In the mean time agricultural information service expanded its activities in providing communication support and emerged as a must for effective extension services. Later Animal Husbandry department also started an information wing attached to its directorate. M.N. Govindan Nair formed the Farm Information Bureau by merging the information wing of the Department of animal husbandry with the agricultural information service and brought it under

the control of the Agricultural Production Commissioner. The bureau emerged as a model for the rest of country providing information communication support to the departments such as agriculture, animal husbandry, dairy, co-operation and to all agencies working in the farming sector of the state. This led to the transformation of Kerala Karshakan to a complete farm magazine and later it converted into a fortnightly.

All the Agriculture Ministers in the state gave a very affectionate support to Kerala Karshakan for enhancing its utility to the farmers. Kerala Karshakan has made a galaxy of editors who rendered yeomen service for making this journal a friend, philosopher and guide to the farmers. T.K.Bhaskara Panicker, B.Remani, G.J. Wincent, Lali and now Suresh Muthukulam have done praise worthy efforts.

Now it is a much sought after magazine not only for farmers but also to all those who love farming. Kerala Karshakan during the last six decades has given a big boost to farm journalism in Malayalam. Kerala Karshakan has earned a unique place of prominence and everywhere it is loved and welcomed with warm affection, as a family magazine. Let this 'romance' grow further. ■

The writer is former Director Kerala Agriculture Department

The crimson gala

The fruit is sour, but the spectacular sight of crimson red fruits hanging down from the tree is indeed a sight for sore eyes. Muttikkai or Moottikkaippan is a lesser-known wild edible endemic fruit tree found throughout the evergreen forests of South Western Ghats. Now, it is the fruiting season of this tree and one can find this fruit bearing tree in isolated

maturity, nodules appear on main stem from where flowers bloom out.

Tiny crimson red flowers in racemes hanging down from the trunk is a beautiful sight. Male and female flowers are produced in separate stalks of same tree. The crimson red fruits are arranged in racemous stalks and hang down in symmetric clusters. It is interesting to note that the fruits are produced even in exposed roots. Fruit clusters are seen throughout the trunk from basal portion upwards. Fruits produced from basal nodules hang down and touches the ground hence the name Moottikkaippan.

The fruits when ripe can be easily plucked out. The fruit is a capsule around 2 – 2.5 centimeters in diameter. The fleshy fruit when ripe is edible but sour with red skin and white pulpy flesh with 4-5 tiny seeds. It is also used for making pickles. Tribals harvest the fruits for food and for preparation of folk medicines. A common tree in silent valley forests, the fruit is the favourite of lion tailed macaques and elephants. The timber is yellowish white in colour and is a soft wood.

The International Union for the conservation of Nature and Natural recourses (IUCN) has enlisted this tree as threatened species in the red data book and need special conservation measures. The propagation is mostly by means of seeds. The seedlings grow well in humus rich soil without much care and attention. The tree starts bearing fruits from eighth to tenth year onwards. The tree having great ornamental potential is found grown in homesteads, parks and botanical gardens. ■

The writer is Agricultural Officer, Farm Information Bureau

homesteads in Kerala. Local vendors and tribals sell this wild edible fruit near forest areas.

A member of Euphorbiaceae family and cousin of Gooseberry, the tree is scientifically named as *Baccaurea courtallensis*. It is a medium tree growing to a maximum height of 8-10 metres. The tree never catches any attention till flowering. It comes to limelight when in full bloom during February- march and consequently during fruiting season during May-June. It is cauliflorous in nature i.e., produces flowers and fruits from the main stem. When the tree attains



GOVERNMENT ORDERS

GO (Rt) No.74 / 2014 /BCDC,dated 01-09-2014

Modified Guidelines have been included for the distribution of the Post metric Scholarship (100 % Centrally Sponsored Scheme) for OBC students. According to the Government order, the annual family income of the student should be 1,00,000 or less. OEC students are not included in this scheme. This scholarship is limited to two persons in one family, but this provision is exempted in the case of girl students. Those students who are now receiving any type of scholarship, or stipend or lump sum grant are not eligible for this scholarship. Applicants for this scholarship should have a minimum of 80% attendance.

GO (MS) No.270 / 2014 /GAD ,dated 26-09-2014

Sanction has been accorded to build a robotic type multi-level vehicle parking system inside the Government Secretariat campus. The parking area will have a capacity of parking 240 cars at a time and the approximate cost is 4.62 crores. The Public Works Department is assigned to execute the project. A committee under the chairmanship of the Chief Secretary will oversee the implementation of the project to assure the protection of the historical monument.

GO (Rt) No. 1717 / 2014 /AD,dated 20-09-2014

A Martyr's Column in remembrance of the staff of the Fire and Rescue services department who died during rescue operations in the last 25 years period will be built. The Martyr's Column similar to that of the Police department will be constructed in the premises of the Chaakka Fire and Rescue station. The fund for the construction will be mobilized from the contributions of the department staff. Government has accorded sanction to build this according to the estimate approved by the PWD.

GO (Rt) No.2559 / 2014 /Home ,dated 25-09-2014

Administrative sanction has been accorded to the Coconut development programme Keragramam for an amount of Rs.21,898.50 lakhs. The major objectives of the scheme are increasing the production and productivity of coconut, integrated pests & disease and nutrient management, promotion of inter cultivation, promote value addition, employment generation etc. Application of organic manure, fertilizers, and undertaking other cultural management practices, distribution of coconut climbing device for clusters, removing senile and diseased plants, replanting with good quality seedlings etc. are the activities proposed under this scheme.

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