

# EVERYDAY CURRENT AFFAIRS - AUGUST 23, 2019

# TAMIL NADU

- The Tamil Nadu government is planning to introduce a new 'Cluster model' to restructure the schools and reduce fall in admissions
  - ✓ According to the new model, headmasters of government higher secondary schools will monitor primary and middle schools within five-km radius to create clusters of 10 to 15 schools

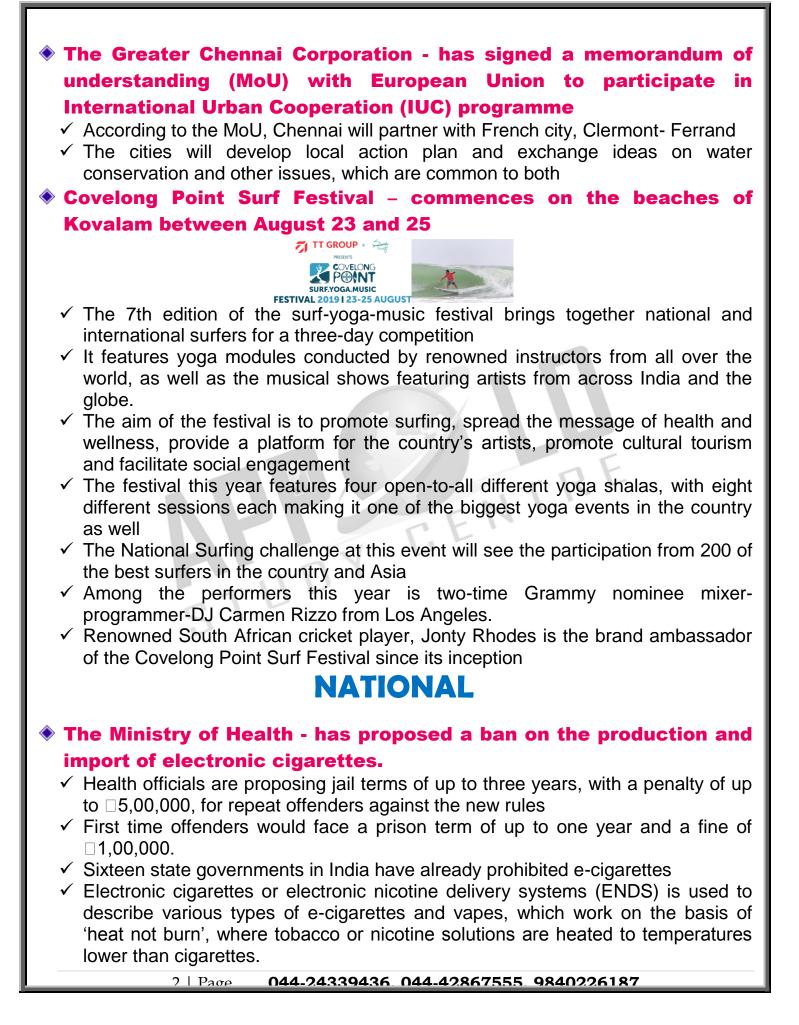
# BETTER RESULT

Each HSS will have a cluster of 10 to 15 primary, middle and high schools

Cluster resource centres will be set up in each HSS

Headmasters of the 3,051 HSS in TN will monitor the schools falling under their cluster, and cluster resource teacher-educators will work under them

- ✓ Each cluster will have a 'resource centre' at the higher secondary school to provide training to teachers and academic support to schools.
- The function of the resource centres is to provide teachers adequate academic support — reference material, interactions with subject experts and strategies for better performance.
- ✓ The heads of higher secondary schools will have necessary powers to oversee teaching and learning in the entire cluster and give necessary guidance.
- ✓ As per the move, about 3,000 headmasters of higher secondary schools will take control of 31,000 primary and middle schools.



# **SCIENCE, TECHNOLOGY & ENVIRONMENT**

## Russia - launches an unmanned rocket carrying a life-size humanoid robot named 'Fedor' to space



- ✓ Fedor is expected to spend 10 days learning to assist astronauts on the International Space Station
- Fedor, abbreviated for Final Experimental Demonstration Object Research, is the first ever robot sent up by Russia
- ✓ It blasted off in a Soyuz MS-14 spacecraft from Russia's Baikonur cosmodrome in Kazakhstan
- ✓ Instead of cosmonauts, Fedor, aka Skybot F850, was strapped into a specially adapted pilot's seat, with a small Russian flag in hand
- "Let's go. Let's go," the robot was heard saying during the launch, repeating the famous phrase used by first man in space Yuri Gagarin.
- ✓ The robot stands 5 foot 11 inches tall and weighs 160kg
- Fedor has Instagram and Twitter accounts with posts saying it is learning new skills such as opening a bottle of water and will try out these skills in low gravity in space
- Fedor copies human movements, a skill that allows it to help astronauts or even people on Earth to carry out tasks while the humans are strapped into an exoskeleton
- ✓ On board, the robot will perform tasks supervised by cosmonaut Alexander Skvortsov, who will wear an exoskeleton and augmented reality glasses in a series of experiments later this month

# DEFENCE

## Coast Guards of India and the United States – conducted a joint exercise off the Chennai coast in the Bay of Bengal on August 23 to promote coordination between the two maritime forces

- ✓ From the Indian side, ICG Shaurya and ICG Abheek ships and Chetak helicopter took part in the exercise that focused on anti-piracy, search and rescue, and fire fighting operations
- ✓ The US Coast Guard ship 'Stratton' and an aircraft associated with the vessel were part of the operation



✓ Stratton was on her maiden visit to India after arriving at the Chennai port

# ECONOMY

## The government - is moving ahead with listing of two railway PSUs — Indian Railway Catering and Tourism Corporation (IRCTC) and Indian Railway Finance Corporation (IRFC)

- ✓ The move expected to take place over the next few months is as part of the government's ambitious disinvestment programme for the current financial year.
- ✓ While the IRCTC listing is expected to help the government generate □500-□600 crore by selling its 12% stake, the listing of IRFC is expected to raise around □2,000 crore through sale of 15% stake.



- Over two years ago, the government had approved listing of five railway PSUs IRCON International, RITES, Rail Vikas Nigam, IRFC and IRCTC.
- Of these IRCON International and RITES were listed during the last financial year.
- The Central Board of Direct Taxes (CBDT) clarified that start-ups with an annual turnover of up to □ 25 crore will continue to get a tax holiday as specified in the Income Tax Act.
  - A start-up has to fulfil the conditions specified in Section 80-IAC for claiming this deduction
  - ✓ According to Section 80-IAC of the Income Tax Act, eligible start-ups would be granted a tax deduction equal to 100% of the profits for three consecutive assessment years, out of the first seven years from the date of incorporation of the company.

## Sabka Vishwas (Legacy Dispute Resolution) Scheme, 2019 – announced by Finance Minister Nirmala Sitharaman in her Budget speech, to be operationalised from September 1 with the window being open till December 31

- ✓ The two main components of the scheme are dispute resolution and amnesty
- ✓ The dispute resolution component envisages the closing of pending disputes relating to legacy service tax and central excise cases that are now subsumed under GST (Goods and Services Tax)
- ✓ The amnesty component of the scheme offers taxpayers the opportunity to pay any outstanding tax and be free of any other consequence under the law.

- ✓ According to the government, the scheme offers a relief of 70% from the duty demand if it is less than □50 lakh and 50% if it is more than □50 lakh for all cases pending adjudication or appeal in any forum.
- In cases of voluntary disclosure, the person availing the scheme will have to only pay the full amount of disclosed duty.

# **APPOINTMENTS**

Ajay Kumar Bhalla – appointed as the next Home secretary



- ✓ He replaces Rajiv Gauba, who has been elevated as Cabinet Secretary
- ✓ Last July, Bhalla was appointed Officer on Special Duty in the Home Ministry as a successor of Gauba.
- ✓ He was Secretary in the Ministry of Power.

## **SPORTS**

Former India opener Vikram Rathour - replaced Sanjay Bangar as India's new batting coach



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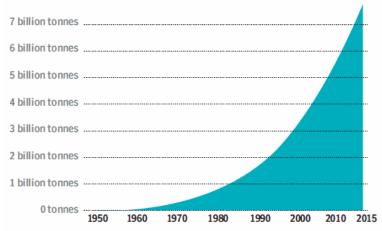
- ✓ Bharat Arun and R Sridhar were retained as bowling and fielding coaches respectively
- ✓ Till 2016, Rathour was a part of the senior selection committee, which was headed by Sandeep Patil.

# WHY DO WE NEED PLASTIC BAN? - A REPORT

On August 20, the Indian Parliament announced it would ban the use of plastic items in the complex. From October 2, Railways will ban single-use plastics. The Indian government has already announced it plans to phase out disposable plastics by 2022. But it wasn't easy for the anti-plastic movement to get to where it is today. A look at the growing plastic menace and how the movement against it came to be

## Almost half of all the plastic ever made has been produced since 2000

#### CUMULATIVE GLOBAL PLASTICS PRODUCTION (Measured in tonnes)



#### 8.3 bn-9 bn tonnes

Total plastic produced globally since 1950. That's equivalent to more than four Mt Everests of waste



Of all plastic ever manufactured has been made since 2000

#### Indians, however, are among the world's lowest consumers of plastic

### 25,940 tonnes How much

plastic waste is generated daily in India, about the weight of 9,000 Asian elephants

#### 11kg per person

How much plastic the average Indian consumes in a year (2014-15), below the global average of 28kg



Of all plastic consumed in India is packaging

## From wonder material to public enemy No. 1

Even experts are surprised at the extent of the backlash against plastic, with many having grown used to the scientists' warnings going unheeded. Some even say the severity of the plastic crisis is overstated in the public sphere, which has led to an arguably more critical issue like climate change getting sidelined. But how did the public opinion on plastic get here?

### 1. THE EARLY PROMISE OF PLASTIC

**19TH CENTURY** A brittle, early form of plastic, called Parkesine or celluloid, is used to make household items

**1907** First iteration of modern plastic, **Bakelite**, invented in the US. Initially intended for use in electrical wiring, its producers quickly realised its potential for use in thousands of products. Over the next few decades, more varieties of plastic are invented that quickly become popular for their versatility

### 2. WAR MAKES PLASTIC ESSENTIAL

1939-1945 Plastic becomes indispensable during WWII. It's used in everything at a time when most other resources are scarce

► US plastic production triples during the war, creating the enormous petrochemical industry



### 3. POST-WAR PLASTIC BOOM

1950s-1970s After the war, plastic products continue to spread, eventually replacing cotton, glass and cardboard

1954 Already, people warn of future problems. Lloyd Stouffer, editor of trade journal Modern Plastics, says the "future of plastics is in the trash can," a claim for which he is mocked

**1965** Plastic enters 13th consecutive year of record growth. The throwaway container market displaces the returnable container model. From a 96% return rate of reusable containers in 1950, return rate falls below 5% in the 1970s

1970 Global soft drinks majors begin to replace their glass bottles with plastic



### CORPORATIONS FIGHT OFF EARLY OPPOSITION

1970s US media outlets raise concerns over growing waste disposal crisis. New York City begins taxing plastic bottles, the US Congress considers a ban on nonreturnable containers and Hawaii bans plastic bottles. But courts strike down the bans and Congress abandons its plans after lobbyists say it will destroy jobs

1970s-1980s Oil and chemical companies band together with drinks and packaging producers to shift the responsibility for plastic waste to the public, arguing irresponsible consumers are behind the waste crisis, not the corporations producing them



Plastic industry pushes for household recycling to tackle waste crisis. But the industry overstates the potential of recycling plastic, which degrades every time it's recycled and can't be reused as effectively as glass or metal

Full ban Partial ban Ban under consideration

Governments are taking action against plastic

Plastic used once

5.800m

### RESEARCH FINALLY BEGINS TO SWAY PUBLIC OPINION

1990s Researchers find 60-80% of waste found in oceans is nonbiodegradable plastic



An oceanographer coins the term "great garbage patch" to describe the buildup of plastic waste in oceans. There are an estimated eight such patches, the largest of which is three times the size of France and has 79,000 tonnes of waste

2004 Another oceanographer coins the term "microplastic" to describe miniscule pieces of plastic that break off from larger objects or are deliberately manufactured, Researchers find that microplastics are being consumed by marine life, resulting in serious damage

2010s Widespread protests against microbeads, small grains of plastic used in cosmetics and cleaning

No data

products, over the harm caused to sea life. Public groups also protest synthetic fabrics that shed microscopic fibres with every wash, and tires that shed plastic fibres when used

2015 A University of Georgia research team estimates between 4.8m and 12.7m tonnes of plastic enters the ocean every year, which is expected to double by 2025

### There's pressure now on firms to take responsibility for plastic pollution

The plastic industry is expected to come under more regulations and public pressure, which could hurt their bottom lines



How much beverage companies could lose in profits to increasing regulations and taxes on plastic over the next decade



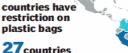
Potential decline in pre-tax profits of four of the biggest plastic packaging producers in the medium term if they continue producing plastic

One-sixth Estimated reduction in demand for petrochemicals in the next 20 years in the face of increased regulations

Even so, Royal Dutch Shell is among several petrochemical giants continuing to expand with new plastic production plants in the US. The new Shell unit alone is expected to produce more than a million tonnes of plastic a year when its complete

Compiled by: Anjishnu Das; Source: Our World In Data, CPCB, UN, media reports





PLASTIC BAG BANS BY COUNTRY

27 countries have banned some form of single-use plastics

### But almost 80% of all plastic remains in the environment

450 years to forever is how long plastic endures in the environment

40% of

plastic produced is packaging used once and then discarded

**79%** Of all plastic produced since 1950 is still in the environment

Total primary plastic production 8.300m

Straight to landfill or discarded

No ban

**PRODUCTION AND** (Measured in tonnes)

**GLOBAL PLASTIC** ITS FATE (1950-2015)

4,600m

#### Incinerated 700m Recycled 500m Recycled then discarded ycled Re then 300m rimary plastic still in use incinerated 100m 2,500m Recycled still in use 100m

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