

ARMED FORCES GIVEN FREE HAND TO RESPOND TO ANY SITUATION IN LAC

The armed forces have gone on full alert along the LAC following the clash. The IAF has forward deployed its frontline fighters, including Su30MKIs and Mig29UPG, and its latest acquisition the AH64E Apache heavy attack helicopter, meant to neutralise armoured formations, has been deployed in Leh.

The CH47 Chinook heavy lift helicopters, too, have been deployed in this region. China has deployed artillery, armoured vehicles and tanks close to the LAC on its side.

GOLDEN LANGUR

Recently Endangered Golden Langur became extinct in Guwahati's Umananda island.

About it:

Golden langurs occupy moist evergreen and tropical deciduous forests as well as some riverine areas and savannas in Assam and Bhutan.

Its geographic range is limited to Assam, India and neighbouring Bhutan.

Their hair ranges from dark golden to creamy buff and their faces are black and hairless except for a long pale beard.

Its fur changes colours according to the seasons.

Their diets consist of ripe and unripe fruits, young and mature leaves, leaf buds, flower buds, seeds, twigs, and flowers.

Habitat destruction is a major threat to them.

IUCN status – Endangered

Chakrashila is India's first wildlife sanctuary with golden langur as the primary species.

As a part of MGNREGA around 27.24 lakh trees will be planted in Assam to sustain the colonies of the Golden Langurs in Bongaigaon district



BIOSIMILAR

The story of simple molecules and some difficult diseases

Ever since modern medicine started to emerge post the Industrial Revolution, simple molecules have been used to treat most diseases.

While these formulations are highly effective against some illnesses, they aren't particularly

effective against more complex diseases like cancer.

Our immune system has evolved over millions of years to specifically defend against outside intruders.

But cancer isn't like most diseases.

It's not caused by an invasion of a foreign pathogen.

Instead, it's a byproduct of rogue cells that destroy our bodies from within.

To this end, using simple molecules to defend against a barrage of mutating versions of our own cells is an exercise in futility.

What is biologic?

A biologic is manufactured in a living system such as a microorganism, or plant or animal cells.

Most biologics are very large, complex molecules or mixtures of molecules. Many biologics are produced using recombinant DNA technology.

What we probably need is a biologic or a complex protein isolated from natural sources that can mimic our immune cells.

Maybe this would help us in fighting cancer.

So, Biosimilars are..

A biosimilar is a biological product that is developed to be similar to an already FDA-approved biologic, known as the reference product. It can be tempting to think of a biosimilar as a "generic" version of the reference product.

But biosimilar is not an exact duplicate of another biologic. There is a degree of natural variability in all biological products; it is not possible to generate a precise copy of a product that comes from living cells. All biologics—including reference products—show some batch-to-batch variation.

Utility of patents in the pharmaceutical industry

Success in this market is deeply intertwined with the research and development process that characterizes the pharmaceutical industry.

It might take 5 years for you to develop a new drug and you might still need another 10 years to clinically test the product and get the necessary approvals from the regulatory agencies.

This is a capital intensive process and the only way to remunerate the pharma company's contribution is to protect their investment through patent laws.

This way the companies can be incentivised to invest more in research and we can ensure a steady supply of new drugs that could cure the greatest maladies of modern time.

What happens when the patent expires?

Once the patent expires, other companies can market their own version of the drug (copycats) if they can figure out how to synthesize it.

Consider—Aspirin. It's a simple molecule drug and it's quite easy to replicate the manufacturing process.

Why biologics would be difficult to replicate after the patent expires?

Biologics are harvested from living cells and are often produced using complicated manufacturing processes.

Most modern biologics are assembled inside vats—or bioreactors—that house genetically engineered microbes or cell cultures and can often take a whole decade of research to perfect. So replicating the process isn't exactly a cakewalk.

Meaning if you want to market your own version of a "biologic" once all the patents expire, you need some expertise and India's Biocon is at the forefront of this revolution.

For the past few years, they've been building a "biosimilar pipeline"—copycats of famous biologics and they've been using it to fight cancer, diabetes, and arthritis.

And it's not all that easy for most pharma companies to enter this market.

Why marketing a drug in the US gather headline?

Because the US provides an opportunity like no other.

Buying drugs here is expensive and pharmaceutical companies make a killing in the process.

It might not necessarily bode well for consumers.

But it does provide a lucrative market for potential Indian manufacturers who are looking to sell their products elsewhere.

Conclusion

Growing expertise of Indian pharmaceutical companies in the complex research area bodes well for the Indian pharma sector which is known otherwise for the manufacturing of generic medicines.

SKOCH AWARD

SKOCH Award, instituted in 2003, is the highest civilian honour in the country conferred by an independent organisation. It recognises people, projects and institutions that go the extra mile to make India a better nation.

SKOCH Award covers the best of efforts in the area of digital, financial and social inclusion. It encompasses the best of governance, inclusive growth, excellence in technology and applications, change management, corporate leadership, corporate governance, citizen service delivery, capacity building, empowerment and other such softer issues that get normally lost in the glamour and glitz of industry sponsored or advertising focussed jamborees.

SKOCH Award comes with a backing of reputation of more than two decades. It is distinctive for its approach of selection of awardees, which is based on nomination, jury evaluation, presentation of shortlisted nominees, focus group discussions, interactions and peer evaluation.

The SKOCH Award not only acknowledges exceptional achievers – organisations and individuals – but also spurs institutional guidance and best practices in the industry.

SKOCH Award

These are competitive awards, based on extensive documentation based nomination. These then go through a whetting process based on desk and secondary research followed by an evaluation presentation to an eminent Jury. Top performers are identified based on the average score awarded by Jurors and Expert Vote and participation in National Exhibit (optional). Good performance at the Expert Vote adds a weightage to the Jury score. Expert Vote from across India becomes an important benchmark for Nominees' evaluation and ranking for the SKOCH Award. Chief Ministers and political leadership are selected based on the cumulative ranking achieved by the state. Only the best performers nationally are conferred the SKOCH Award. Typically, 30 awards are conferred.

JAL JEEVAN MISSION

Jal Jeevan Mission (JJM) envisages supply of 55 litres of water per person per day to every rural household through Functional Household Tap Connections (FHTC) by 2024.

JJM focuses on integrated demand and supply-side management of water at the local level.

Creation of local infrastructure for source sustainability measures as mandatory elements, like rainwater harvesting, groundwater recharge and management of household wastewater for reuse, would be undertaken in convergence with other government programmes/schemes.

The Mission is based on a community approach to water and includes extensive Information, Education and Communication as a key component of the mission.

JJM looks to create a jan andolan for water, thereby making it everyone's priority.

Funding Pattern:

The fund sharing pattern between the Centre and states is 90:10 for Himalayan and North-Eastern States, 50:50 for other states, and 100% for Union Territories.

The Central government has recently released the operational guidelines for JJM.

For the implementation of JJM, following institutional arrangement has been proposed:

National Jal Jeevan Mission (NJJM) at the Central level

State Water and Sanitation Mission (SWSM) at the State level
District Water and Sanitation Mission (DWSM) at the District level
Village Water Sanitation Committee (VWSC) at Village level

Every village will prepare a Village Action Plan (VAP) which will have three components:

Water source & its maintenance
Water supply and
Greywater (domestic wastewater) management.

INTERNATIONAL YOGA DAY

June 21 is observed as International Day of Yoga every year since the United Nations declared it in 2015.

The United Nations theme for this year is “Yoga for Health – Yoga at Home”, which takes into account the social distancing measures announced by most countries.

Background

The idea of International Day of Yoga was first proposed by Prime Minister Narendra Modi during his speech at the UN General Assembly (UNGA), on September 27, 2014.

A draft resolution on 'International Day of Yoga' introduced by India's Ambassador to UN received support from 177 nations, the highest number of co-sponsors for any UNGA resolution.

Thereafter, the United Nations proclaimed June 21 as the International Day of Yoga.

International yoga day coincides with the summer solstice.

Yoga is inscribed in the list of UNESCO Intangible Cultural Heritage of Humanity of India.

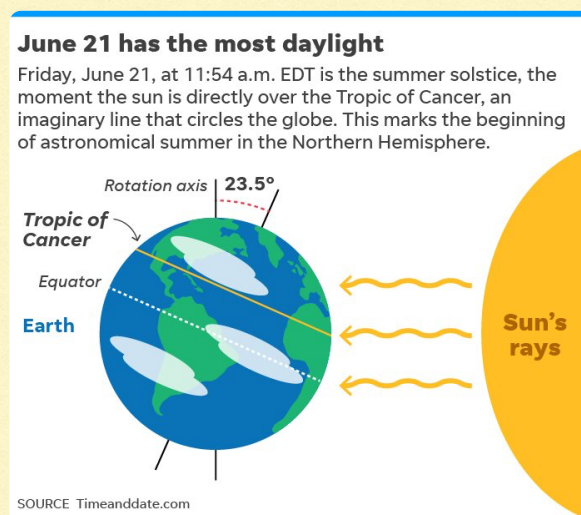
Summer Solstice

In the Northern Hemisphere, the summer solstice occurs on June 21 with the longest period of daylight.

On June 21st, the Northern Hemisphere is tilted towards the sun and the rays of the sun fall directly on the Tropic of Cancer.

As a consequence, areas exposed to sun rays receive extra heat and the areas near the poles get less heat (as the rays of the sun are slanting).

As a large area of the Northern Hemisphere is receiving light from the sun, it is summer in the



regions north of the equator and longest day & the shortest night at these places occur on 21st June.