

DAILY PT POINTERS

19th June, 2024



The Hindu-Health(GSII)/Science and Tech(GSIII)Page 10

Does H5N1 pose a threat for humans?

Can the highly pathogenic axian influenza HSNI strain spread from cattle to humans? What is the strategy to identify and contain the spread of the virus? What is the concept of 'One Health' and how is Kerala using it to limit the spread of axian influenza?

EXPLAINER

C. Maya

he story so far:

he highly pathogenic avian influenza (HPAI) H5N1 strain has been affecting cattle acrossseveral States in the U.S., and for the first time, three cases of human infection in dairy farm workers were also reported, raising fears of the risks of a wider transmission of this virus from cattle to humans. The districts of Alapouzha, Kottavam and Pathanamthitta in Kerala, where water bodies, migratory birds, fowls and integrated farms form part of the ecosystem, have reported H5NI outbreaks in 19 places since April. However, the death of crows in large numbers in Alappuzha, and subsequent confirmation of the H5NI virus in their carcasses have given rise to concerns that the virus could spread far and wide.

How dangerous is it?

Ever since it emerged in 1996, H5NI has resulted in the mass killing of billions of wild birds as well as fewls. The virus's jump to some 26 mammalian species, especially cattle and the now emerging proof that it can infect humans, has heightened the threat perception that HSNI could lead to the next global pandemic. Of particular concern are the facts that herd-to-herd transmission of H5NI is now taking place in the U.S., involving some 12 States and that the virus has been detected in raw milk and in milking machines. According to scientists. the virus lacks changes that would make it better adapted to transmit between people and therefore, the risk to human health remains low. However, the potential for influenza viruses to rapidly evolve and the wide geographic spread of H5N1 signals that more human infections should be expected.



All risk evaded: Ducks being killed by the Animal Husbandry Department, in Alappusha, on April 19. PT

birds/animals to humans who may be closely interacting with these, without adequate personal protection. According to the WHO, between 2003

and April 1, 2024, close to 900 human infections of HSSI have been reported from 23 countries, of which, more than half were fatal. Even though the risk of human infections from HSSI is still perceived to be low, this can change rapidly as the virus spreads to more arimals, especially coves or domestic mice, which have closer contact with humans. In districts like Alappurha where water fowls, chicken, dairy cows and humans share the same environment, the opportunities for human infections should be perceived as high.

including respiratory difficulties, fever, cough, sore throat and pneumonia, all of which can potentially worsen, especially in those who are immunocompromised or have underlying conditions. In the U.S., conjuctivities or pink eye was the only symptom that was reported in one of the farm workers who was infected.

In April Isself, the Center for Disease Control and Prevention (CDC) had sent out a health advisory that chinicians should consider the possibility of HSNI infection in persons who report with respiratory illness or conjunctivitis, if they have had exposure to livestock or dead birds. Early detection and containment of the infection is important to prevent the extensive spread of the virus.

As of now, in Kerala, as only the

THE GIST

The districts of Alappusha, Kottayam and Patharamthitta in Kerala, where water bodies, migratory birds, foods and integrated farms foom part of the ecosystem, have reported HSNI outbreaks in 39 places since April.

The virus seems to spread from birds/animals to humans who may be closely interacting with these, without adequate personal protection.

in a recent editorial, The Loncet, spoke about the need for a robust and coordinated response to HSMI. If painted out that the concept of "One Health", although often acknowledged, is rarely prioritised and operationalised.

one has been exposed to a possible HSNI-contaminated environment, they should monitor themselves for new respiratory illness symptoms, including conjunctivitis for 10 days and seek proper medical advice. It would be better to

ensure that people use only pasteurised

milk and poultry meat and eggs should be

well-cooked to prevent any possible

nfection. However, the incident of the mass death of crows has now changed the equation, as it is possible that the infection may have been taken by the

crows beyond the current surveillance

zone. Continuous surveillance by testing

matter of birds - as well as influenza-like

environmental samples - water, faecal

illness human samples would be

necessary in designated surveillance

sones. People who have livestock and

prescribed as prophylaxis to people

birds at home are being advised to wear masks, and the antiviral Tamiflu is being

wherever H5Nl positive cases are found.

What are the necessary precautions? People should avoid unprotected

exposure to infected birds or animals or

their contaminated environments. If at all

food-borne transmission of H5Nl. In a recent ecitorial, The Lancet, spoke about the need for a robust and coordinated response to H5Nl. It pointed out that the concept of 'One Health', although often acknowledged, is rarely mointristed and operationalises.

Kerala, however, has taken 'One Headth' beyond the conceptual framework and the project is currently being implemented as part of the World Banie aided 'Rebuild Kerala' project in four districts' - Alapputha, y Pathanamthitta, Kottayam, and Idukki. It has established a community based of disease surrelilance network, with 2.5 lakh volunteers trained in the 'One Health' concept in these districts, who will report arts unusual events or death of will report arts unusual events or death of

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IAS

- According to the WHO, between 2003 and April 1, 2024, close to 900 human infections of H5N1 have been reported from 23 countries, of which, more than half were fatal.
- Avian influenza is a highly contagious viral disease that
 affects both domestic and wild birds. Avian influenza
 viruses have also been isolated, although less frequently,
 from mammalian species, including humans. This
 complex disease is caused by viruses divided into
 multiple subtypes (i.e. H5N1, H5N3, H5N8 etc.) whose
 genetic characteristics rapidly evolve. The disease occurs
 worldwide but different subtypes are more prevalent in
 certain regions than others.

The Hindu:_GS 3-Environment -Page 10

How can Himachal Pradesh fight against forest fires?

What does the State need to do in order to democratise forest management and curtail raging forest fires?

Tikender Singh Panwar

The story so far:

r imachal Pradesh (H.P.) is witnessing widespread forest fires across the region. Pradesh Forest department, there have been a total of 1,684 forest fires since April These fires have damaged a total of 7,471 hectares of forest land, resulting in significant loss to wildlife. From 2001 to 2023, H.P. has lost 957 hectares of tree cover from fires and 4.37 thousand hectares from all other drivers of loss.

Fires in the Himalayas occur during the pre-monsoon summer period of moisture stress, due to the resultant depletion of snowmelt water. The moisture conditions of the pre-monsoon season, characterised by rainstorms, play a critical role in

How do forest fires start in the State?

as unattended campfires, discarded cigarettes etc., are also some of the common causes for forest fires.

These fires are also a major source of pollutants, including black carbon, which significantly contribute to glacier melt in the Himalayas and negatively influences the regional climate. The primary causes of these forest fires are faulty forestry practices, and treating forests from a utilitarian perspective, excluding people's participation.

undergone a transformation? The Himalayan forests have been systematically transformed over the last two centuries. A crucial watershed moment in Indian forestry began with the construction of railways in the 1850s. Lord Dalhousie's understanding about railway construction was that the railways were to be constructed not just to market

for British capital seeking profitable

Have the Himalayan forests

of Himalavan forests continue to be a driving force. From 1853 to 1910, the construction of around 80,000 kms of

railway track led to an assault on forests and the extinction of the customary rights of the people. Between 1869 and 1885, 6.5 million sleepers were made of Deodar, and the area for Chir pines was expanded for timber and resin. Total trees from which resin was tapped between 1910 and 1920 increased from 2,60,000 to 21,35,000. Resin was used for commercial and industrial applications, and its extraction continues to be a major source of production from pine forests. Verrier Elwin, an Oxford scholar and renegade priest, wrote in the early 20th century that State-managed forestry led to the gradual replacement of the Banj oak, a source of fuel, fodder, and leaf manure, with the Chir pine, which was more valued commercially as a source of timber and resin. Ecologically, Banj forests British goods but also to serve as an outlet absorb a high content of rainwater.

Currently, more than 17.8% of the total THE GIST 37,033 square kilometers of forest area is covered with Chir pine trees in H.P. Chir forests are very vulnerable to forest fires.

What needs to be done?

Democratisation of forests is essential to ensure that people and communities who have lived in and around forests are made April 15. part of the forest management process The rights of the local community have been periodically curtailed, and as a result, when forest fires start, first responders are nowhere to be found.

The traditional forest rights of Himalayan dwellers included the right to extract wood for fuel, timber, fodder, and other activities. H.P. is under Schedule V of the Indian Constitution, which requires community assent for development activities in the region. However, for large projects like hydro power generation road widening, and four-lane highways, forests are being diverted with ease.

What the Himalayan States now need is to build mixed forestry and remove pine trees; ensure that both scientific and community knowledge converge and forest management is conducted in a participatory manner; implement check dams and other methods to revive water springs; create environmental services at the village level; and articulate their case with the ongoing 16th Finance Commission, seeking help apart from disaster mitigation funds.

Author is former Deputy Mayor, Shimla

According to the Himachal Pradesh Forest department there have been a total of 1.68

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How do forest fires start in the State?

Fires in the Himalayas occur during the pre-monsoon summer period of moisture stress, due to the resultant depletion of snowmelt water. The moisture conditions of the pre-monsoon season, characterised by rainstorms, play a critical role in determining the nature of forest fires. The less moisture there is, the greater the impact of the fires. Human activities such as unattended campfires, discarded cigarettes etc., are also some of the common causes for forest fires.

These fires are also a major source of pollutants, including black carbon, which significantly contribute to glacier melt in the Himalayas and negatively influences the regional climate. The primary causes of these forest fires are faulty forestry practices, and treating forests from a utilitarian perspective, excluding people's participation.

The Hindu: GS3-Science and Tech

Despite rising number of accidents, Kavach work still on the slow track





- The KAVACH is an indigenously developed ATP system by Research Design and Standards Organisation (RDSO) in collaboration with Indian industry and trials facilitated by South Central Railway to achieve the corporate objective of safety in train operations across Indian Railways. It is a state of the art electronic system of Safety Integrity Level - 4 standards.
- KAVACH is meant to provide protection by preventing trains to pass the signal at Danger (Red) and avoid collision. It activates the train braking system automatically if the driver fails to control the train as per the speed restrictions. In addition, it prevents collision between two Locomotives equipped with functional KAVACH system.

'Kavach' is one of the cheapest, Safety Integrity Level 4 (SIL-4) certified technologies with the probability of error is 1 in 10,000 years. Also, it opens avenues of export of this indigenous technology for Railways.

The Hindu- GS3-Science and Tech





India's nuclear arsenal reached 172 warheads this year, slightly surpassing Pakistan which has 170.

China, on the other hand, has triple that number, with 500 warheads, some of which are believed to be on high operational alert for the first time, according to the Swedish think tank Stockholm International Peace Research Institute (SIPRI).

SIPRI also noted that India is strengthening the undersea leg of its nuclear triad as well as developing long-range missiles.

World nuclear forces,	January 2024

	Deployed warheads ^a	Stored warheads ^b	Military ^c stockpile		Retired ^d warheads		- 1
Country	2024	2024	2023	2024	2023	2024	
United States	1 770	1 938	3 708	3 708	1 536	1 336	
Russia	1 710	2 670	4 489 ^f	4 380	1 400	1 200	į
United Kingdom	120	105	225	225 ^g	-	-	
() France	280	10	290	290	-	-	
China	24 ^h	476	410	500	-	-	
3 India	-	172	164	172	-	-	
Pakistan	-	170	170	170	-	-	
North Korea	-	50	30	50 ⁱ	-	-	
🗷 Israel	_	90	90	90	-	_	

The Hindu-Scinece & Tech (GSIII)-Page 14

Scientists from India, China, U.K. develop catalyst to produce cheaper biodiesel

Rahul Karmakar GUWAHATI

A team of scientists from Assam and Odisha in India, China, and the U.K. has developed a water-repellent catalyst that can cut the cost of producing "environmentally benign" biodiesel substantially from the current levels.

The process of arriving at the "spherical superhydrophobic activated carbon catalyst" to withstand water byproduct during the production of biodiesel – pursued as a substitute for diesel, an exhaustible fossil fuel – has been published in the latest issue of the peer-reviewed Advanced Functional Materials, a high-impact journal of the international materials science community.



Dr. Samuel Lalthazuala Rokhum, centre, one of the authors of the study, with his researchers. SPECIAL ARRANGEMENT

are Arpita Das, Kangkana Saikia, and Samuel Lalthazuala Rokhum of the Department of Chemistry, National Institute of Technology (NIT), Silchar; Chandrakanta Guchhait and Bimalendu Adhikari of Shi of the University of Cambridge in the United Kingdom; and Hu Li of the Guizhou University in China.

Superhydrophobic catalysts, imitating the antiwetting or water-repulsing faces such as lotus leaves, are deemed crucial for their ability to prevent the poisoning of active sites by water, produced *in situ* or as a by product.

"Our novel superhydrophobic catalyst can be a game-changer in the field of biodiesel production. It stands out because of unmatched robustness; it can withstand the water byproduct during biodiesel production," Dr. Rokhum told *The Hindu*.

"This means the catalyst remains highly effective and can be reused multiple times, making the catalytic process more efficient and cost-effective," he said.

He further said the catalyst, derived from biomass (cellulose), is ecologically benign, abundant, and highly affordable. "This

tential to significantly reduce the cost of biodiesel production, making sustainable energy more accessible," he added. At present, the cost of

biodiesel in India is about ₹100 or \$1.2 per litre. Using the superhydrophobic activated carbon catalyst can bring down the cost to about 37 cents per litre. A litre of less fuel-efficient diesel costs at least ₹87 in India. "Biodiesel is a key player in the quest for sustainable energy. Our innovative catalyst could pave the way for broader adoption and a greener future because it makes the production process more efficient, cost-effective, and environment friendly," Dr. Rokhum, among the world's top five scientists in the field of biodiesel,



- A team of scientists from Assam and Odisha in India, China, and the U.K. has developed a water-repellent catalyst that can cut the cost of producing "environmentally benign" biodiesel substantially from the current levels.
- Superhydrophobic catalysts, imitating the anti-wetting or water-repulsing properties of natural surfaces such as lotus leaves, are deemed crucial for their ability to prevent the poisoning of active sites by water, produced in situ or as a by-product.
- At present, the cost of biodiesel in India is about ₹100 or \$1.2 per litre. Using the superhydrophobic activated carbon catalyst can bring down the cost to about 37 cents per litre. A litre of less fuel-efficient diesel costs at least ₹87 in India. "Biodiesel is a key player in the quest for sustainable energy.

Indian Express—Geography (GSI)-Page 14

Where is the monsoon?

The monsoon arrived over Kerala on time, and progressed well until June 10. But it has been dry and hot over the Southern peninsula thereafter. The Bay of Bengal branch of the monsoon too, has not progressed

ANJALI MARAR

BENGALURU, JUNE 18

ON ALMOST all days in June so far, North and Northwest India have experienced 'heatwave' to 'severe heatwave' conditions. The southwest monsoon that made an early onset over Kerala has advanced until Maharashtra, but maximum temperatures in the plains of North India have sustained around 45-47 degrees Celsius.

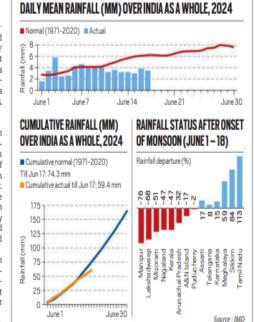
Monsoon basics and dates

The June-September southwest monsoon brings more than 70% of India's annual rainfall. Climatologically, the monsoon arrives over the Andaman Sea in the third week of May and advances into the mainland through Kerala, June 1 being the normal date of onset.

It then advances in surges — typically, the progress until central India is fast, after which it slows down. The monsoon normally reaches north Uttar Pradesh, Delhi and neighbourhood areas by the end of June, and covers the entire country by luly 15.

An early or timely onset of the monsoon does not guarantee good rainfall or its distribution ower the country throughout the fourmonth season. And a delayed onset does not necessarily mean below-average rainfall for the entire season.

Cumulative rainfall over the country from



Two branches of monsoon

The IMD declared onset over Kerala o May 30, and the monsoon advanced ove large parts of eastern India on the same da mainly due to Cyclone Remal, which mad landfall over the West Bengal an Bangladesh coasts on May 26, and its rem nantstravelled further inland. Heavy to ver heavy rain lashed Assam, Meghalay, Tripura, and Sikkim, leading to floods, muc slides, and landslides in early June.

Strong westerly/ southwesterly wind from the Arabian Sea propelled the monsoo over the Southern peninsula in early Jun Multiple cyclonic circulations along the wes ern coast also provided conducive conditior until June 10, after which the absence of syr optic systems led to the southwesterly winc losing steam and the monsoon weakening

"In the absence of strong easterly wind the Bay of Bengal branch of the monsoo (too) could not advance. We will have to wa for a fresh pulse and monsoon trough to e: tablish itself, so that the monsoon systemre gains strength," D Sivananda Pai, senior me teorologist at IMD, said.

When could it rain?

The monsoon is currently active ove Arunachal Pradesh, Assam, Meghalay. Sikkim, Nagaland, Manipur, Mizoran Tripura and sub-Himalayan West Benga



- Southwest monsoon normally sets in over Kerala around 1st June. It advances northwards, usually in surges, and covers the entire country around 15th July.
 - The winds blow from Arabian Sea and Bay of Bengal towards the land. They carry moisture with them.
 When these winds strike the mountain barriers, rainfall occurs.
- The June-September southwest monsoon brings more than 70% of India's annual rainfall. Climatologically, the monsoon arrives over the Andaman Sea in the third week of May and advances into the mainland through Kerala, June 1 being the normal date of onset.
- The India Meteorological Department (IMD) has forecast 'above normal' rainfall this season.

Indian Express:GS 2-Polity and Governance

PRO TEM SPEAKER

A senior Lok Sabha MP who is temporarily appointed Speaker and administers oath to new Members

NEW DELHI, JUNE 18

IHE 18TH LOK SABHA will hold its first session between June 24 and July 3, during which the new Speaker will be elected. Prime Minister Narendra Modi will move the motion for the election of the Speaker in the Lok Sabha on June 26. Congress leader K Suresh, an eight-term MP, is expected to be appointed pro tem Speaker.

Who is a pro tem Speaker?

As the Presiding Officer of Lok Sabha, the Speaker has to fulfil certain duties and is elected by a simple majority vote in the Lower House. Until the Speaker is elected, the pro tem Speaker is appointed to administer some important duties. 'Pro tem' means 'for the time being' or 'temporarily'.

The Constitution does not mention the post, but the official 'Handbook on the Working of Ministry of Parliamentary Affairs' mentions the appointment and swearing in of Speaker protem.

How is the pro tem Speaker chosen?

The handbook states that when the Speaker's post is vacant before a new Lok Sabha meets, "the duties of the Speaker are to be performed by a Member of the House appointed for this purpose by the President as Speaker protem".

Mormally the conjument MD is an

pointed as the Speaker pro tem. Three other MPs, the next in terms of seniority, are appointed to assist the Speaker pro tem.

As soon as the new government is formed, the Legislative I Section of the Legislative Department of the government prepares a list of the seniormost Lok Sabha members. It is then submitted to the Minister for Parliamentary Affairs or the Prime Minister for identifying an MP as Speaker pro tem and another three members for oath-taking.

How are oaths administered?

After the Prime Minister's approval, the Ministry gets the consent of these MPs. The Minister then submits a note to the President, seeking approval for their appointments. The date and time for the ceremony are also decided.

Once the President approves, the Ministry informs the appointed members. Finally, the President administers the oath to the Speaker pro tem at Rashtrapati Bhavan. The other three members appointed by the President are administered the oath by the Speaker pro tem in the Lok Sabha.

The Speaker pro tem then administers the oath or affirmation to the newly elected MPs with the help of the other three members. Since the session of the Lok Sabha starts at 11 am, the time generally fixed for swearing in of the Speaker pro tem is on the morning of the same day at 9.30 am, subject to the convenience of the Precident.



- The 18th Lok Sabha will hold its first session from June 24 to July 3, during which the new Speaker of the House will be elected.
- Article 94 of the Indian Constitution states: "Whenever the House of the People is dissolved, the Speaker shall not vacate his office until immediately before the first meeting of the House of the People after the dissolution."
- In the new Lok Sabha, the Speaker of the House is decided by a simple majority. Until her selection, the protem Speaker is chosen to administer some important duties. 'Pro-tem' essentially means 'for the time being' or 'temporarily'.
- The Constitution does not mention the post. However, the official 'Handbook on the Working of Ministry of Parliamentary Affairs' speaks about the 'Appointment and Swearing in of Speaker pro tem'.

Indian Express:GS 3-S&T

Disease that has struck singer Alka Yagnik



IN A post on Instagram, Bollywood singer Alka Yagnik on Monday revealed that she has been that runs from the inner ear to the brain. diagnosed with a "rare sensory neural nerve hearing loss", known as sensorineural deafness, the inner ear is damaged. In this case, stereear, neck, and throat (ENT) specialist explains tion properly, leading to deafness. what sensorineural deafness is, what causes it. and how it can be prevented.

What is sensorineural deafness?

The human ear consists of external, middle, and inner structures. When you listen to a sound, your eardrum or tympanic mem- How can the inner ear be damaged? brane (which divides the external ear from the

middle ear) vibrates. The vibration passes on can be damaged by a viral infection, leading What is the treatment? that vibrate when the sound waves hit them. the damaged tiny hair cells. These hair cells convert the sound waves into

Sensorineural hearing loss occurs when is hearing loss.

Unlike in the case of damage to the external or middle ear, deafness due to damage to What are the symptoms? the inner ear may not always be cured if not addressed promptly within 48 hours, Ideally, you should consult a specialist within a week. able to catch words coherently when others

Like in the case of Yagnik, the inner ear sound in the ear. Numbness can also occur.

to three tiny bones - malleus, incus, and to sensorineural deafness. The infection typstapes – in your middle ear. These bones ically triggers inflammatory responses and week of the symptoms surfacing, doctors can transmit the sound waves to the cochlea — a swelling, which puts pressure on the inner administer steroid injections in the eardrum. fluid-filled chamber in your inner ear — which chamber. The situation can worsen as stem It will improve the hearing and relieve the is lined with tiny hair cells, called stereocilia, cells in the ear are not able to quickly repair swelling. If the damage is more serious, then

an electrical signal, which is then sent to the have been diagnosed with sensorineural You can also opt for cochlear implants. brain, through the auditory nerve — a nerve deafness. Every year, the flu season has certain dominant characteristics — this time, it How can it be prevented?

after suffering from a viral infection. A leading ocilia or the auditory nerve is not able to funcloud sounds that last for a long time.

The sense of hearing drastically goes down or you cannot hear at all. You are not are talking and they may seem like mumbling. There can also be a ringing or buzzing

there are solutions such as hearing aids. This season, many people with viral flu which can amplify sounds near the patient.

The forms of flu are becoming more ag-The inner ear can also be damaged due to gressive with each passing year. As a result, - wear a mask in public places, and take an annual shot of flu vaccine. To protect yourself from any kind of hearing loss from external sources, wear good earplugs.

> Dr Nagpal is a senior consultant at the ENT in Indraprastha Apollo Hospital, New Delhi. She spoke to



- Rare sensorineural nerve hearing loss (SNHL) is characterized by damage to the inner ear or the nerve pathways connecting the ear to the brain.
- This condition, termed 'rare' as it accounts for only 5-15% of all hearing loss cases, can result from various factors such as loud noise exposure, infections, autoimmune diseases, and trauma.
- It can happen in any age group. It may happen due to loud sound exposure, infection, autoimmune disease, neurological, vascular disease, trauma or some drugs and in some cases due to tumor."

Indian Express:GS 3-Economy

GOVT SET TO PRESENT UNION BUDGET NEXT MONTH

Industry seeks removal of 'Angel Tax'; to greatly aid capital formation, says CII

RAVIDUTTA MISHRA NEW DELHI, JUNE 18

AMID Asharp decline in funding for startups and consequent job losses, Indian Inc has sought the removal of Angel Tax that has been a subject of heated debate between the industry and the government ever since the scope of the controversial tax was expanded in the Finance Bill 2023.

The Confederation of Indian Industry (CII) in its Union Budget recommendation on Tuesday suggested the removal of Section 56(2)(viib) of the Income-tax Act colloquially known as the 'angel Tax' stating that the step "would greatly aid capital formation in the country".

Angel Tax was first introduced in 2012 to deter the generation and use of unaccounted money through the subscription of shares of a closely held company at a value that is higher than the fair market value of the firm's shares.

The industry has argued that the government is wrong in citing the difference between valuations and actual performance as a sign of money laundering, adding that investors fund



ANGEL TAX - which is income tax at the rate of 30.6 per cent - is levied when an unlisted company issues shares to an investor at a price higher than its fair market value, Earlier, it was imposed only on investments made by a resident investor. However the Finance Act 2023 proposed to extend Angel Tax even to nonresident investors from April 1, 2024.

unlisted securities and its fair market value (FMV) has hurt funding, it said. The changes in the Angel Tax provisions came at a time when an estimated 100 Indian startups laid off over 15,000 employees in 2023, as funding winter that began in 2022 persisted. Moreover, Indian startups witnessed over 60 per cent decline in funding in terms of value in 2023.

sion stated that when an unlisted company, such as a startup, receives equity investment from a resident for issue of shares that exceeds the face value of such shares, it will be counted as income for the startup and be subject to income tax under the head 'Income from other sources' for the relevant financial year.

With the latest amendment, the government had proposed to also include foreign investors in the ambit, meaning that when a start-up raises funding from a foreign investor, that too will now be counted as income and be taxable.

The Department for Promotion of Industry and Internal Trade (DPIIT)-recognised startups were excluded from the Angel Tax levy.

However, after pushback from the industry and reports of decline in funding, the Finance Ministry exempted investors from 21 countries including the US, UK and France from the levy of Angel Tax for non-resident investment in unlisted Indian start-ups.

But the list excluded investment from countries like Singapore. Netherlands and



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PIB:GS 3-Economy

Ministry of Agriculture & Farmers Welfare

Krishi Sakhi

Posted On: 18 JUN 2024 10:27AM by PIB Delhi

Prime Minister Shri Narendra Modi will grant certificates to more than 30,000 self-help groups as Krishi Sakhis at Varanasi on June 18, 2024. Realizing the significant role & contribution of women in agriculture and to further enahncing the skills of rural women, the Ministry of Agriculture and Farmers' Welfare and the Ministry of Rural Development signed a MoU on 30.08.2023. Krishi Sakhi convergence program (KSCP) is the ambitious initiative under this MoU. Lets get to know more about Krishi Sakhis:-



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the Ministry of Agriculture and Farmers' Welfare and the Ministry of Rural Development signed a MoU on 30.08.2023. Krishi Sakhi convergence program (KSCP) is the ambitious initiative under this MoU. Lets get to know more about Krishi Sakhis:-

What is Krishi Sakhi convergence program (KSCP)?

Under the 'Lakhpati Didi' program, the aim is to create 3 crore Lakhpati Didis, one dimension of which is Krishi Sakhi. Krishi Sakhi convergence program (KSCP) aims to transform rural India through the empowerment of rural Women as Krishi Sakhi, by imparting training and certification of Krishi Sakhis as Para-extension Workers. This certification course aligns with the objectives of the "Lakhpati Didi" Program. Krishi Sakhis are chosen as agriculture para-extension workers because they are trusted community resource persons and experienced farmers themselves. Their deep roots in farming communities ensure they are welcomed and respected.

PIB:GS 3-Environment

Ministry of Road Transport & Highways

NHAI to Enhance Green Cover Along the National Highways with Miyawaki Plantations

Posted On: 18 JUN 2024 3:42PM by PIB Delhi



- To realise the vision of saturating National Highways with green cover, NHAI will undertake a unique initiative to plant Miyawaki plantation on land parcels adjacent to National Highways at various locations. Total land area of over 53 acres has been identified at different places in and around Delhi-NCR to establish the Miyawaki plantations.
- Miyawaki plantations, also known as Miyawaki method is a unique Japanese approach to ecological restoration and afforestation development. This method aims to create dense, native, and biodiverse forests in a short period of time. These forests retain ground water and helps to recharge the ground water table. With this method, trees grow ten times faster and the plantations act as a sound and dust barrier. For successful implementation of the Miyawaki Plantation method, focus will be on plantation of indigenous species of plants that can survive in the local climate and soil conditions.