VIPNET CURIOSITY

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MAYFLY

THE MYSTERIOUS INSECT

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EDITORIAL

K.B. Bhushan

Scientific Social Responsibility: Building Participatory Approach in the Young minds

Dear VIPNET Club Member it is indeed a great pleasure for me to be a part of the team VIPNET. Being an active science communicator, I am aware of the essential moral duty of the scientific community, which is to utilise science for societal welfare and ensure transfer of scientific knowledge for the benefit of the society. Education aimed at preparing future scientists for social responsibilities is presently quite limited and seemingly insufficient in view of the ethical and social problems that exist in the country. VIPNET aims at grooming students and boosting their spirit of scientific rationality, curiosity, inquiry, innovation, and creativity through activities that supplement traditional education and make science learning enjoyable and interesting. It is important to inculcate participatory approach in the young minds in order to develop understanding of social and economic issue supported with scientific thinking.

We at Vigyan Prasar have always tried our best to faithfully and honestly fulfil our scientific social responsibility (SSR). With VIPNET we have been focussing on nurturing the student's ideas through hands-on activity and outreach programmes. Over the past few years VIPNET clubs' members have been doing an incredible job of organising various popular science activities that had far-reaching implication for the development of the society. I urge our members to organise and participate on more such activity-based learning activities that will prepare the students, the young scientist, who would be the backbone of our society in future and lead the country. We have some exciting plans for a bigger science movements and we want our clubs to play major role in every such upcoming activities.

VIPNET Curiosity has done a great job in terms of reach and count. For the upcoming issues we seek more activity-based articles and one-of-its-kind activities that can be performed by the club members. Such articles will not only aid in the development of a scientific approach but will also assist our members in developing critical and creative thinking skills. Feedback and suggestions are cordially welcomed from our readers. Let us take a pledge to strengthen the VIPNET and reach newer heights. I am sure the confluence of scientific knowledge, visionary leadership, and Janbhagdari (people's participation) VIPNET science clubs will reach to millions of our countrymen and build a stronger nation in the coming 25 years.

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Mayfly, the mysterious insect

Jay Krishan Kumar

Mayflies are hemimetabolous. They are unique among insects in that they moult one more time after acquiring functional wings. This last but one winged (alate) instar usually lives a very short time and is known as a Subimiago. The Subimago stage does not survive for long, rarely for more than 24 hours. Despite their name, Mayflies are active during the warmer months of the year, not just May! They tend to be gray or brown and have long thin abdomens.

The scientific name for the Mayfly is ephemeroptera, which in Greek means "Short lived". Mayflies emerge in large groups but have short lifespans. Other names for the Mayfly include the dayfly, drake, fishfly, sandfly and shadfly. Mayflies are aquatic insects belonging to the order Ephemeroptera. This order is part of an ancient group of insects termed the Palaeoptera, which also contains dragonflies and damselflies. Over 3,000 species of Mayfly are known worldwide, grouped into over 400 genera in 42 families.

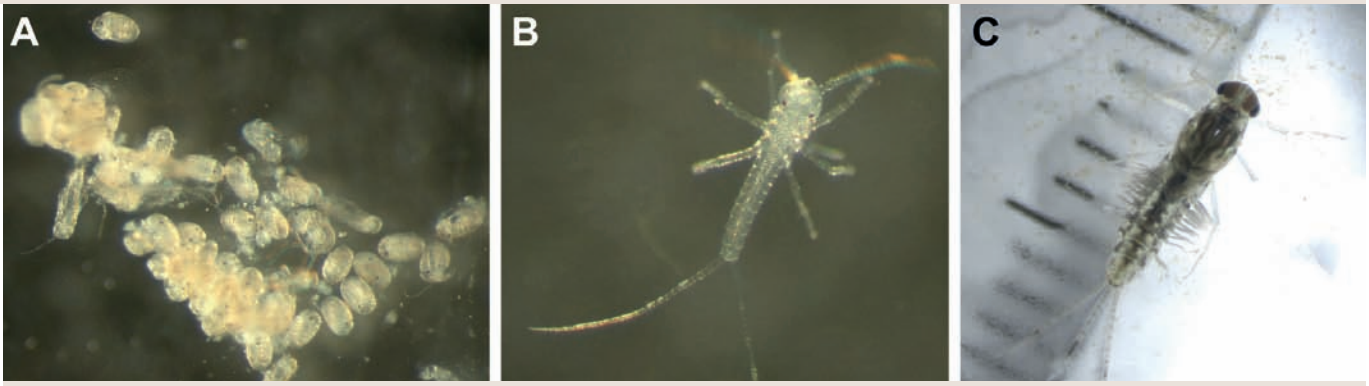
John Slader Mayfly Commended Riverfly Partnership / National insect week 2010

Most Mayfly nymphs or naiads live in streams with clean, shallow water but some reside in still waters and around the age of lakes. As naiads age, they start to develop gills. Naiads that live in still waters have larger gills and those living in moving streams have smaller gills. Naiad's gills control water flow and salt and oxygen intake.

Nymphs can live for several months and then emerge from the water as adults. Seeing Mayflies around streams can be a sign of good water quality. Since a naiad's gills are vulnerable to polluted water. When a large number of Mayflies hatch near a waterbody, it is a sign of a healthy water ecosystem because they are very sensitive to pollutants. Nymphs feed on microscopic algae and organic matter in the water. Adults don't have functioning mouthparts and therefore do not eat. However, this isn't any issue since Mayflies only live as mature adults for a few minutes or a day.

The Mayfly's life cycle is one of the most fascinating and fleeting stories in the natural world. One of many characteristics that makes mayflies the unique insects is the potential for two different winged adult forms in their lifecycle. The nymph emerges from the water as a dull-coloured subimago or dun that seeks shelter in bankside vegetation

A day in the life of a mayfly lab



Dipterum nymphs. (A) Nymphs hatching from the eggs right after being delivered. (B) One hatchling few minutes after hatched. (C) Three-weeks-old male nymph.
https://thenode.biologists.com/day-mayfly-lab/lablife

and trees. After a period of a couple of hours or more, the subimago once again sheds its skin to transform into the brightly coloured imago or spinner.

A Mayfly's life cycle starts with the males forming a swarm above the water and the females flying into the swarm to mate. The male grabs a passing female with its elongated front legs and the pair mate in flight. After copulation, the male releases the female, which then descends to the surface of the water where she lays her eggs. Once mated she will fall spent onto the water surface to lie motionless, with her wings flat on the surface, where fish pick them off at their leisure. The male fly rarely returns back to the water but instead he goes off to die on the nearby land. The eggs fall to the bottom of the water where they stick to plants and stones. Flies of the Mayfly family Baetidae pull themselves under the water to attach their eggs directly to the bed being drowned by the current. The Nymph takes anything between a few days to a number of weeks to hatch depending on water conditions, and the species and the resultant nymphs will spend various lengths of time, up to two years, foraging on the bottom before emerging as an adult fly.

Adult Mayflies are relatively primitive in structure, exhibiting traits that were probably present in the first flying insects. These include long tails and wings that do not fold flat over the abdomen. Mayflies are delicate looking insects with one or two pairs of membranous, triangular wings, which are extensively covered with veins. At rest the wings are held upright, like those of a butterfly. Mayflies have large eyes and short antennae as adults. The slender body of a mayfly makes the eyes appear larger, which is why they are referred to as "bug eyes." Mayflies have pairs of large clear triangular wings with vertical and horizontal veins that give them the appearance of a delicate net.

The mayfly's wings are similar to butterfly wings in how they are attached to the insect's thorax.The larger wings of the mayfly are at the front of the body, with small round wings behind. The mayfly has two or three thread-like tails. Tails can be as long as the insect's body. Mayflies may varies in size and colour but they tend to blend with the background. Mayfly can range from one-tenth of an inch to just over an inch or three centimeters long–about the size of a quarter. Sometimes mayflies emerge in such large numbers that they cover light posts, trees, and tall grasses, making them nuisances around homes and businesses.

Mayflies are nuisance pests and cannot bite or sting. They are, however, very attracted to light which can result in massive swarms around buildings at night and piles of dead flies below lights and windows in the morning can be spotted. In areas that see large swarms, Mayflies could affect driving conditions and visibility. Mayflies could be a source of seasonal allergies for some. When they die, their molted skin and bodies break up and are easily carried by the wind.

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QUIZ ON MAYFLIES

1. What kingdom do Mayflies belong to?
- a. Monera
- b. Animalia
- c. Protista
- d. Plantae

2. What do Mayflies eat
- a. Algae, larvae and aquatic plants
- b. Blood
- c. Pollen
- d. Nectar

3. What is the scientific name for the Mayfly
- a. Caelifera
- b. Acrididae
- c. Ephemeroptera
- d. Rhopalocera

4. Mayflies sting or bite
- a. Sting
- b. Bite
- c. Both
- d. None of abobe

Send us the correct answers of the quiz at
curiosity@vigyanprasar.gov.in to win exciting prizes.
Don't forget to mention your name and address along with the answers.

ANSWERS OF CURIOSITY MAY ISSUE

Across:
1. Salim Ali Research Centre is in Anaikatti.
3. Southwest monsoon in Tamil Nadu starts from the month of June.
4. Example of plantation crop Rubber.
6. Largest Electrochemical Laboratory is CECRI.
7. The soil of Tamil Nadu is broadly classified into Five types.

Down:
2. Meenakshi Amman Temple is in Madurai.
5. The Dakshina Bharat Hindi Prachar Shaba is in Chennai.

Ramjas College: Rich Legacy and Heritage

Pankhuri Srivastava

As we walk along the streets of the famous North Campus of Delhi University, well known for its centres of educational excellence and active and bustling student life, there stands in front of us, the impressive Red building of the Century-old legacy, The Ramjas College. Rai Kedar Nath laid the foundation of Ramjas college in the year 1916, after he started a high school from a small rented house Chandni Chowk's Kucha Natwan. However, by 1917, he decided to lay down the foundation of a full-fledged college, establishing it in Daryaganj, where at the present day, Ramjas School Number 1 and the Ramjas Foundation's office currently lies. The foundation to this day runs the Ramjas college, along with 16 Ramjas schools. The college was named by Rai Kedar Nath after his father, Lala Ramjas Mal.

As one of the founding colleges of University of Delhi, in the journey of its 105 years, this college has traversed a long path. The college was founded with the aim to provide education to the city's common folk, a tradition that is continued till date. The college is still being considered as a 'college of the masses'. Shri Rai Kedarnath Ji, a selfless philanthropist, who took upon himself the noble task of setting up an education institutions for the masses at a time, when education was available only to the privileged. Having dedicated his own and his wife's life earnings and belongings (Sarvasva Daan) towards the cause of education and taking the vow of austerity, self-abnegation and aparigraha, he became a symbol of humanity himself.

Admission to the college was solely based on merit and no student was discriminated or denied admission on the basis of caste or social status. All that was needed to be at Ramjas was a will to seek knowledge. This motto of providing education based on merit was carried forward when the college got affiliated to the University of Delhi, becoming one of first three colleges (after Hindu

Ramjas College, Delhi

College and St. Stephen's College).

The college shares a cherished past with respect to India's freedom struggle. The Ramjas Hostel sheltered Chandra Shekhar Azad, while he was evading the British government. Azad was protected by the students and he was disguised as a Sikh student from Pakistan, for months.

The Anand Parbat campus of the college was closely linked with Mahatma Gandhi and the freedom struggle. It is believed that soon after the college was established there, Mahatma Gandhi was invited by Rai Kedarnath.

During the Quit India Movement in 1942, a group of students from the college participated in the Movement and had to face the repercussions from the British. In order to honour their brave spirit, a plaque with their names had been put up in the college in their memory some years later after India attained its independence.

A part of the plaque reads, "This plaque is being erected in the cherished and fearlessly participated in the Quit India Movement-1942 and suffered imprisonment and privatisations."

Ramjas College proudly celebrated its Centenary in 2016-2017. India Post issued a postage stamp to commemorate it which was released by the then President Shri Pranab Mukherjee.

After the death of Rai Kedarnath, Babasaheb B.R. Ambedkar, the architect of Indian Constitution, acted as the Chairman of Governing Body making Ramjas the only college in Delhi to have the honour of him being in the Governing Body. On 12 February 1959 the

college got a chance to host the American leader Martin Luther King Jr's visit and witness his memorable lecture.

In January 2004, the college got the fortuity to organize the first ever conference of graduate students of Economics from SAARC countries.

The college relocated to its current location in 1950 where it was inaugurated by Dr Rajendra Prasad, the first President of India on 17 January 1951.

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Telangana: The youngest state of India

B. Odelu Kumar

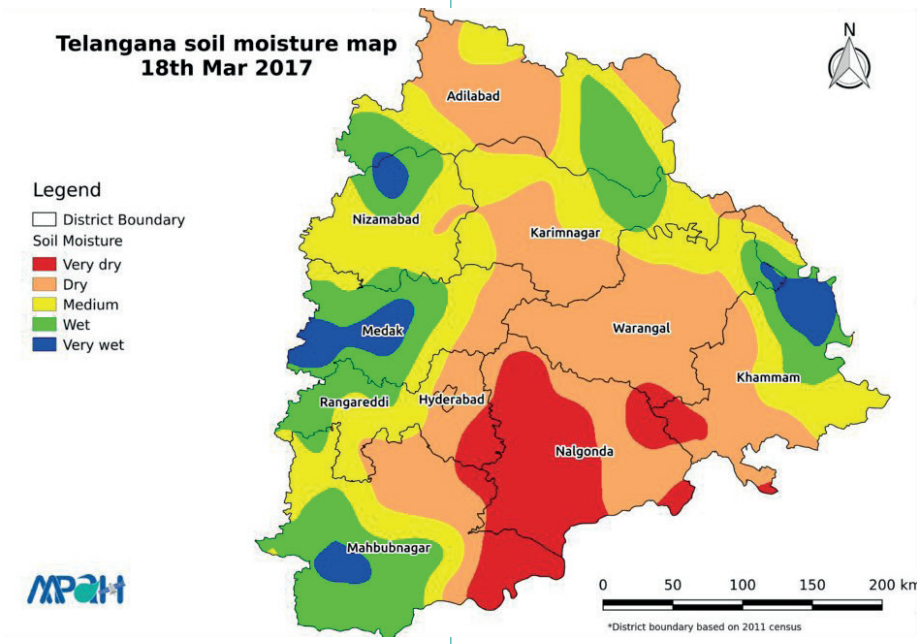
Telangana, as a geographical and political entity, was born on 2 June 2014 as the 29th and the youngest state of India. However, it has great economic, social, cultural, and historical importance and a glorious history of at least two thousand five hundred years or more. This is evident from the Megalithic stone structures like cairns, cists, dolmens and menhirs found in several districts of Telangana. Remnants of iron ore smelting has also been found at many places that indicates its tradition of artisanship and tool making. The region emerged as the foremost centre of culture in Indian subcontinent during the rule of Kakatiyas, the Qutb Shahis, and Asaf Jahi dynasties.

Telangana is home to diverse culture and religions. Till 6th century, the region was predominantly ruled by the Buddhist and is the home of Mahayana Buddhism. From the 14th century onwards Islam began to spread. Urdu is the second widely spoken language in the state.

Soil types found in Telangana

The state has an area of 1,12,077 Sq. Km. The state has several soil types. It has red shallow gravelly soils (12%), red clayey soils (13%), deep calcareous soils (9%), red gravelly loam (8.4%) and colluvial soils (8% of the area).

The most easily available soil type in Telangana is the Red soil; it covers nearly 48% of Telangana's geographical area. Around a quarter of Telangana's area is covered with black soil, also known as regur soil. Other soil types available are Laterite and Alluvial soils.



Vegetation in Telangana

Telangana has moist deciduous forest. In these forest trees like sandalwood, rosewood, teakwood, and bamboo are found in abundance. In relatively plain areas trees like mango, neem, and Mahogany are found. Vegetables like onion, tomato, brinjal, etc. are cultivated.

The state receives water from the Godavari and Krishna rivers, making the

The State Bird - Palapitta (Indian Roller or Blue Jay)

The State Animal - Jinka (Deer)

The State Tree - Jammi Chettu (Prosopis Cineraria)

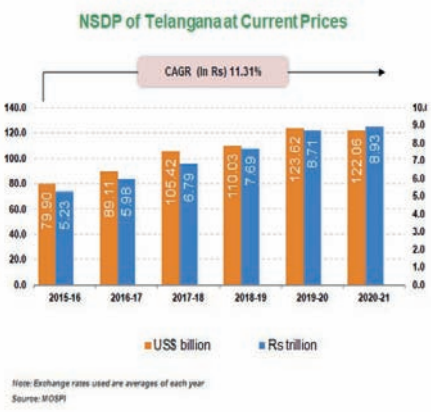
The State Flower - Tangedu (Tanner's Cassia)

soil suitable for vegetable cultivation. Vegetables produced are transported to nearby states like Karnataka, Tamil Nadu, Kerala, and Andhra Pradesh making the economy of the state flourishing.

The State has dense Teak forests on the northern part along the banks of river Godavari. Among the fauna, the State is rich with 108 species of mammals that include Tiger, Leopard, Sloth Bear, Giant Squirrel, Hyena, Fox, Wild Dog, Wild Boar, Indian Bison(Gaur), Spotted Deer, Barking Deer, Black Buck, Four-horned Antelope, Blue Bull, Sambar, Mouse Deer, Honey Badger, Civets, Jungle Cats, Otter, Pangolin, Bats, Tree Shrew, Common Langur, etc. There are also hundreds of species of birds, including flamingos and pelicans. Telangana is home to some two dozen national parks, wildlife sanctuaries, and protected areas, including two tiger reserves that adjoin similar facilities in neighbouring states.

Economy of Telangana

Telangana is one of the fastest-growing states in India posing average annual growth rate of 13.90% over the last five years. Service sector is the largest contributor to the Telangana's economy and growth in this sector has largely been fuelled by IT services with the State holding leading position in IT and ITeS in the country in terms of production and exports.



Major educational and research institutes

- Centre for Economic and Social Studies (CESS), Hyderabad
- Indian School of Business (ISB), Hyderabad
- Birla Institute of Technology and Science (BITS), Hyderabad
- Central Research Institute for Dryland Agriculture (CRIDA), ICAR, Hyderabad
- Centre for Cellular and Molecular Biology (CCMB), Hyderabad
- Centre for DNA Fingerprinting and Diagnostics (CDFD), Hyderabad
- Defence Metallurgical Research Laboratory (DMRL), Hyderabad
- Defence Research Development Organization (DRDO), Hyderabad
- Electronics Corporation of India Limited (ECIL), Hyderabad
- Indian Institute of Chemical Technology (IICT), Hyderabad
- Indian Institute of Millets Research (IIMR), ICAR, Hyderabad
- International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)
- National Geophysical Research Institute (NGRI), Hyderabad
- National Institute of Agricultural Extension Management (MANAGE), Hyderabad
- National Institute of Fashion Technology, Hyderabad
- National Institute of Nutrition (NIN), Tarnaka, Hyderabad
- Tata Institute of Fundamental Research Hyderabad
- Tata Institute of Social Sciences Hyderabad

Medical colleges and research institutes

Government Colleges

- Osmania Medical College, Koti, Hyderabad
- Gandhi Medical College, Musheerabad, Hyderabad
- Kakatiya Medical College, Warangal
- Rajiv Gandhi Institute of Medical Sciences, Adilabad
- Government Medical College, Nizamabad
- Government Medical College, Mahbubnagar
- ESI Medical College, Sanathnagar, Hyderabad
- Government Medical College, Siddipet
- Government Medical College, Nalgonda
- Government Medical College, Suryapet
- All India Institute of Medical Sciences, Bibinagar

Tourism is also a significant sub-sector under the services sector. The Ramappa temple and Pochampally village gained world-wide recognition as a UNESCO World Heritage Site and a UNWTO Best World Tourism Village in 2021, respectively. These recognitions are a fillip to the tourism sector in the state and the Government is actively promoting tourism with various initiatives to boost the economy and employment.Telangana is also considered as the most favoured location for next generation sectors like Artificial Intelligence, Blockchain, Cloud Adoption, and Cybersecurity.

Agriculture forms the backbone of Telangana's economy. Farmers in Telangana mainly depend on rain-fed water sources for irrigation. Rice is the major food crop. Other important local crops are cotton, sugarcane, mango, and tobacco. Recently, crops used for vegetable oil production, such as sunflower and peanuts, have gained favour. There are many multi-state irrigation projects in development, including Godavari River Basin Irrigation Projects.

Heritage of Telangana

As the 'South of North and North of South,' Telangana has long been a meeting place for diverse languages and cultures. It is easily the best example for India's composite culture, pluralism, and inclusiveness. Located on the uplands of Deccan plateau, Telangana is the link between the North and South of India.

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Purple Revolution in making

India Science Wire

Jammu and Kashmir were traditionally known for their apple orchards, walnuts, mulberry, saffron, Chinar and Pine trees, roses, tulips, and ever chanting snow-capped Himalayan mountains and the Dal lake.

Things have been steadily changing over the last decade. Now there is also a purple revolution. Lavender farms have started dotting the landscape, adding yet another colour, purple, thanks to a mission-based programme initiated by the Council of Scientific and Industrial Research (CSIR) to catalyse rural empowerment.

More than 1,000 farming families have already been covered under the scheme. They are cultivating the plant on more than 200 acres in different parts of J&K. Each farmer has employed at least five other people. Thus, the mission employs over 6,000 families. Women have been the biggest beneficiaries as they are primarily engaged for harvesting and processing the flower. Besides, several young entrepreneurs have started small-scale businesses through the value addition of lavender oil, and the preparation and sale of dried flowers.

Under the scheme, CSIR's Jammu-based Indian Institute of Integrative Medicine (CSIR-IIIM) provides the farmers with the planting material for an elite variety of lavender and an end-to-end technology package for cultivation, processing, value addition, and marketing of the Lavender crop. Called RRL-12, the variety is highly suitable for cultivation in the rainfed regions of the temperate regions of India, including

Kashmir valley and temperate areas of the Jammu division. Scientists at CSIR-IIIM have developed it.

Among other things, CSIR-IIIM conducts skill development programmes to train farmers and entrepreneurs. it has also arranged for fifty distillation units (45 fixed and five mobile) at different locations to help the farmers process their produce.A press release on the mission noted that lavender oil fetched a price of around Rs 10,000/- per kg and dry lavender flowers a price between Rs. 1000/- to Rs 1500/-. Lavender oil production varied between 40-60 litres per hectare per year. The lavender farmers who earlier used to earn an annual income of Rs. 40,000/- to Rs. 60,000/- per hectare by growing maize and other crops now earn between Rs. 3,50,000/- to Rs. 6,00,000/- per hectare. In the Doda district, for instance, the lavender farmers had produced 300, 500, and 800 Litres of Lavender oil in 2019, 2020, and 2021. They earned over Rs. 3.0 Crore between 2018-2021.The release noted that the region's current production of lavender oil is just at the inception stage. It is expected to increase manifold in the coming years. The production of lavender oil in J&K will help import substitution and save foreign reserves. Besides, there is excellent scope for exporting Lavender oil as it has good global demand, it added.

By
India Science Wire

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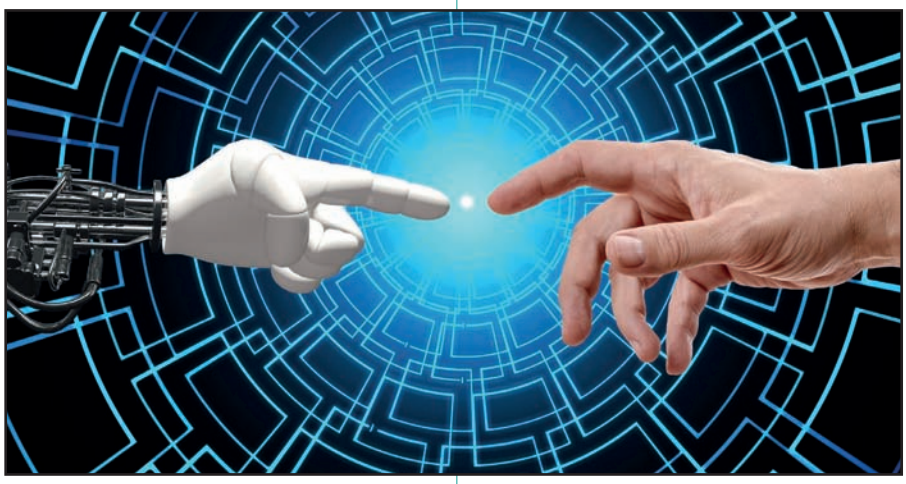
वैज्ञानिक सामाजिक उत्तरदायित्वः समाज और विज्ञान के बीच एक नया जुड़ाव

विभा सकलानी एवं मानसी उपाध्याय

विज्ञान एक ऐसा साधन है जिसके द्वारा सामाजिक सशक्तिकरण प्राप्त किया जाता है। वैज्ञानिक विकास राष्ट्रीय विकास को दर्शाता है। विशेषज्ञों का मानना है अगर विज्ञान को सामाजिक जरूरतों से जोड़ा जाए तो कई सकरात्मक प्रभाव पैदा होंगे, जो सामाजिक विचारों को नया रूप देंगे। इस विचारधारा के संदर्भ में सरकार ने वैज्ञानिक सामाजिक उत्तरदायित्व (एसएसआर) पर एक नीति को प्रस्तुत किया है। कॉर्पोरेट सामाजिक उत्तरदायित्व की तर्ज पर वैज्ञानिक सामाजिक उत्तरदायित्व नीति को लागू करने वाला भारत विश्व का पहला देश बनने जा रहा है। विज्ञान को समाज से जोड़ने और वैज्ञानिक गतिविधियों को बढ़ावा देने के लिये विज्ञान और प्रौद्योगिकी आधारित संस्थानों एवं वैज्ञानिकों को प्रोत्साहित करने के लिये यह कदम उठाया जा रहा है।

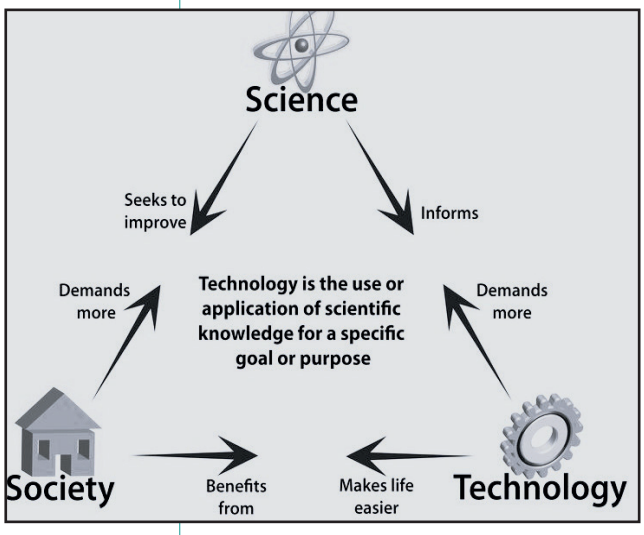


सन् 2017 में भारतीय विज्ञान कांग्रेस के 104 वें सत्र में विज्ञान को जन–जन तक पहुंचाने के लिए "वैज्ञानिक सामाजिक उत्तरदायित्व" की आवश्यकता पर प्रकाश डाला गया था । "वैज्ञानिक सामाजिक उत्तरदायित्व" को विज्ञान और प्रौद्योगिकी के सभी क्षेत्रों में सेवा और पारस्परिक जागरूकता की भावना के साथ समाज में व्यापक स्तर पर हितधारकों तक पहुँच बनाने के लिये कई कार्यकर्ताओं द्वारा अपने ज्ञान और संसाधनों का योगदान करने हेतु एक नैतिक दायित् के रूप में परिभाषित किया गया है। इस नीति का मुख्य उद्देश्य वैज्ञानिकों को श्प्रकाशनश और 'शोध कार्य' से आगे बढ़कर अपने कौशल का उपयोग करके सामाजिक जरूरतों को पूरा करना है, जिससे समाज और वैज्ञानिकों दोनों को इससे परस्पर लाभ हो ।

वैज्ञानिक सामाजिक उत्तरदायित्व ने "विज्ञान–समाज का जुड़ाव", "विज्ञान–विज्ञान का जुड़ाव", "समाज–विज्ञान का जुड़ाव", और "सांस्कृतिक परिवर्तन" के रूप में विशिष्ट उद्देश्यों को सूचीबद्ध किया है।

वैज्ञानिक सामाजिक उत्तरदायित्व दिशानिर्देशों के अनुसार हितधारकों को चार अलग–अलग श्रेणियों में वर्गीकृत किया है; जहां पहली श्रेणी में "लाभार्थी" शामिल हैं, जिनमें स्कूल और कॉलेज के शिक्षक, छात्र, आंगनवाड़ी कार्यकर्ता, गैर सरकारी संगठन आदि सम्मिलित हैं, जो एसएसआर गतिविधि से लाभान्वित होंगे। दूसरी श्रेणी में "कार्यान्वयन कार्यकर्ता" शामिल हैं, जिनमें निजी और सार्वजनिक ज्ञान संस्थान और उनके कार्यकर्ता, केंद्रीय मंत्रालय, राज्य सरकारें, उनके विभाग और संबद्ध स्वायत्त एजेंसियां सम्मिलित हैं। तीसरी श्रेणी में व्यक्तिगत, परियोजना और संस्थागत स्तरों पर एसएसआर गतिविधियों का मूल्यांकन करने के लिए आंतरिक और बाहरी मूल्यांकन एजेंसियों वाले "मूल्यांकनकर्ता" शामिल हैं। अंतिम और चौथी श्रेणी में "समर्थक" शामिल हैं जिनमें हितधारकों को वित्तीय सहायता प्रदान करने के लिए कई एजेंसी या व्यक्ति शामिल हो।

वैज्ञानिक सामाजिक उत्तरदायित्व नीति के सफल कार्यान्वयन के लिए, देश के प्रत्येक जिले में एक एंकर वैज्ञानिक संस्थान



(एएसआई) की पहचान भी की जाएगी। एएसआई उन सामाजिक समस्याओं को इंगित करने के लिए जिम्मेदार होंगे जिन्हें तत्काल ध्यान देने एवं वैज्ञानिक समाधान द्वारा सुलझाया जाएगा। राज्य स्तर पर, सभी जिला एएसआई को उनके संबंधित "राज्य विज्ञान और प्रौद्योगिकी परिषद" (एसएस एंड टीसी) या अन्य वैज्ञानिक संस्थानों से जोड़ा जाएगा। एएसआई और एसएस एंड टीसी पूरे देश में प्रभावी ढंग से एसएसआर दिशानिर्देशों को लागू करने के लिए विज्ञान और प्रौद्योगिकी विभाग (डीएसटी) में स्थित प्रोग्राम मोनिट्रिंग यूनिट (पीएमयू) के साथ राष्ट्रीय स्तर से जुड़ेंगे। पीएमयू को विज्ञान और प्रौद्योगिकी विभाग द्वारा गठित एक राष्ट्रीय शीर्ष समिति (एनएसी) द्वारा निर्देशित किया जाएगा। राष्ट्रीय शीर्ष समिति में इसके सदस्यों के रूप में विज्ञान और समाज के विभिन्न हितधारक शामिल हैं। इसके अतिरिक्त, पीएमयू, डीएसटी के साथ मिलकर राष्ट्रीय स्तर पर संपर्क और संचार की सुविधा के लिए एक राष्ट्रीय डिजिटल पोर्टल का निर्माण किया जाएगा जो कि कई हितधारकों को जोड़ने के लिए एक मंच के रूप में कार्यरत होगा और एसएसआर की तमाम गतिविधियों और परिणामों की जानकारी भी देगा। राष्ट्रीय पोर्टल जिला स्तर पर एएसआई और राज्य स्तर पर एसएस एंड टीसी को उनके संबंधित कार्यान्वयनकर्ताओं के साथ जोड़े रखेगा।

इस नीति में सामाजिक समस्याओं को वैज्ञानिक और नवीन समाधान से सुलझाने की क्षमता है, अगर एसएसआर के लाभ की बात करें तो यह नीति विज्ञान से मिलने वाले लाभों और समाधान का प्रसार करके देश के युवाओं में विज्ञान के प्रति रुचि बनाए रखने में प्रोत्साहित करेगी। यह नीति भविष्य में कौशल विकास के लिए प्रशिक्षण और वैज्ञानिक ज्ञान को भी अपग्रेड करेगी। साथ ही ग्रामीण नवाचार को विज्ञान एवं प्रौद्योगिकी द्वारा सुगम बनाने में यह नीति कारगर होगी। इतना ही नहीं यह नीति, विज्ञान एवं प्रौद्योगिकी के माध्यम से महिलाओं, वंचितों और समाज के कमजोर वर्गों का सशक्तीकरण का कार्य भी करेगी। जल, पारिस्थितिकी, स्वास्थ्य और आजीविका जैसे सतत विकास लक्ष्यों और देश के प्रौद्योगिकी विज़न 2035 को सफल और सुगम बनाने में वैज्ञानिक सामाजिक उत्तरदायित्व का अहम महत्व रहेगा। वैज्ञानिक सामाजिक उत्तरदायित्व विज्ञान और समाज के बीच दोतरफा जुड़ाव बनके उभरेगा जो न केवल समाज पर वैज्ञानिक प्रभाव डालेंगे बल्कि सामाजिक प्रभाव के बारे में भी है विज्ञान को विस्तृत जानकारी प्रदान करेंगे। वैज्ञानिक सामाजिक उत्तरदायित्व एक आत्मनिर्भर राष्ट्र के निर्माण की दिशा में हमारे नागरिकों के जीवन में सुधार करके समाज का मौलिक रूप से परिवर्तन करने की क्षमता रखता है।

विभा सकलनी एवं मानसी उपाध्याय
विज्ञान प्रसार में प्रोजेक्ट एसोसिएट के रूप में कार्यरत है।

खेल खेल में विज्ञान

जय जवान-जय किसान, जय विज्ञान और जय अनुसंधान
इस नारे को लेकर आइये सीखें,खेल खेल में विज्ञान।
अतुल्य भारत और समृद्ध भारत के सपने को करने साकार,
विज्ञान प्रसार के विपनेट विज्ञान क्लबों के साथ दें इसे आकार।
जहाँ खेल खेल में रोचक गतिविधियों से रहस्य जानते हम विज्ञान के,
कैसे संजोयें अपना पर्यावरण चक्षु खोलकर सीखते हम ज्ञान के।
कैसा होता जीवों का जीवन चक्र, कैसे वृध्दि वो करते हैं,
कैसे होती वर्षा, कैसे सागर से बादल पानी भरते हैं।
आओ सीखें कैसे पचता हमारा खाना,
कैसे पौधों को भी पड़ता अपना भोजन बनाना।
कैसे घूमती धरती कहाँ रहते सूरज और चन्दा,
सीखकर हम खगोल विज्ञान रहस्यों का खोलते फन्दा।
ग्रहों और उपग्रहों के बारे में भी सीखते सारा ज्ञान,
विपनेट विज्ञान क्लबों के द्वारा करते सूर्य और
चन्द्र ग्रहण का भान।
कैसे बहती हवा कैसे बनता धरती पर पानी,
विपनेट क्लबों से ही सीखते हम अब नही बताती दादी- नानी।
जब जादू और सामाजिक कुरीतियों पर करते हम विज्ञान का प्रहार,
तब हमें राष्ट्रीय स्तर पर प्लेटिनम-गोल्ड-सिल्वर और
ब्रोन्ज का मिलता उपहार।
रहस्य मानवता के सीखकर बनते हम महान,
जय जवान-जय किसान,जय विज्ञान और जय अनुसन्धान ,
इस नारे को लेकर आइये सीखें खेल खेल में विज्ञान।
अतुल्य भारत और समृद्ध भारत के सपने को करने साकार,
विज्ञान प्रसार के विपनेट विज्ञान क्लबों के साथ दें इसे आकार।

अमित कुमार शर्मा
जोनल कोआर्डिनेटर, विपनेट विज्ञान क्लब
(VP-DL0023)

Celebration of Earth Day

Nav Urja Sanchar Science Club members (VP-UK0039) along with CNI Girls School organised a workshop on the occasion World Earth Day. Quiz activity and various brainstorming sessions were organised for the students. Around 208 attendees participated in the programme.

Environment Awareness Program

Barahamihir Vipnet Science Club (VPOD-0219) conducted an activity programme on the use of industrial waste after proper treatment. The programme was conducted in collaboration with Rajdhani Vipnet Science Club. Role of harmful gases and their purification were discussed during the programme. Around 50 participants were present who participated in the programme actively. The programme was conducted at P.S. Khadura Sahi Kodala School, Orissa.

Activity Programme

Ryan Science Club (VP- RJ0111) conducted an activity programme for Class XII students on capillary actions. The main objective of the programme was to encourage students in exploring, experimenting, and learning independently. The activity was conducted at Ryan International School, Jaipur.

World Earth Day Awareness Programme

Every Day I am Calculating Club (VP-PB0180) in association with Eco Club of Sacred Heart Convent School Jamalpur Ludhiana celebrated the World Earth Day. The programme was highlighted with Poster Making and Best Out of Waste competitions. Children and club members also planted trees during the programme.

Rainbow Making Activity

How and why club members (VP – DL1037) along with SDMC Pratibha School hosted an activity programme for students in which they participated in a rainbow-making activity. They were provided with information on rainbow colours - VIBGYOR. Around 350 students participated in the activity. The activity was conducted in school premises at SDMC Pratibha School.

Water Conservation Awareness Programme

Suchetana Science Club (VP-WB0113) celebrated Water Conservation Day at Naskardighi Primary School. Various activities on proper use of drinking water and many other issues were addressed during the programme.

World Earth Day Celebration

On the occasion of World Earth Day How and Why Club members (VP-DL0137) organised an awareness programme for students. A Poster Making activity was organised and skits were performed by the members and students during the occasion.

World Book Day Celebration

Suchetana Science Club (VP-WB0113) commemorated World Book Day in collaboration with Panskura Primary School, West Bengal. On this occasion, students received various books. Around 150 attendees participated in the programme.

World Heritage Day

Suchetana Science Club members (VP-WB0113) along with Naranda New Primary School celebrated World Heritage Day with great enthusiasm. The event was celebrated at Naranda New Primary School Vivekananda Palace, West Bengal. Around 30 participants were present at the event.

Celebration of Earth Day

On the occasion of World Earth Day Nav Urja Sanchar Science Club (VP-UK0039) conducted workshop and quiz activity for the students. The events focussed on Climate Change, Sustainable Development Goals, and Sustainabilitymembers and students during the occasion.

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