

SUCCESSFUL CULMINATION OF OWOL

The 'One Week One Lab' (OWOL) programme of CSIR-NPL, Delhi culminated as nation's capital with a Skill Conclave. The conclave was open to the public, and about 400 persons from various academic institutions, business, students, and members of the general public from a range of societal vocations were present. Welcoming the gathering, Prof Venugopal Achanta, Director CSIR-NPL, spoke about the nation's need for demand and supply of skilled resource persons during the Skill Conclave. Additionally, he spoke about how the grooming of new talents, upgrading of current ones, and the development of new ones, as well as innovative thinking, are crucial for the progress of any nation. "CSIR-NPL organises various training programs/ courses on a regular basis in the field of metrology to promote and train the skill man power for the country in order to bridge the gaps between the skill manpower supply and demand of the country", Prof Achanta added. In his speech, the Guest of Honour, Dr Nagahanumaiah, Director, CMTI, Bengaluru, discussed the problems faced by our education system and also discussed probable solutions for the same. He said, "PSUs should revive themselves by introducing rigorous Graduate Engineering Training (GET) programme." Also, he motivated young brains to develop skills related to applied field of engineering and also described the internship and skill development programmes at CMTI.

Prof. T. G. Sitharam, Chairman of AICTE, who was the Chief Guest, delivered a visionary speech. In his lecture on 'Building a coherent skilling ecosystem for India,' he said, "Humans will be at the center even after the emergence of the artificial intelligence platforms like chat GPT as the technology is developed by humans only." He also added that every day, the technology is changing at rapid speed, so to make pace with new upcoming technologies, we need to acquire knowledge and keep updating our skills to make India as Vishwa-Guru.

In this captivating event, the keynote speaker Dr R Chidambaram, (Padma Vibhushan), former Principal Scientific Advisor, Government of India emphasized on the need to generate new knowledge, and the importance of skill to add on to the knowledge. He shared his views on the Statements of World Bank which says that low skills perpetuate poverty and inequality. "However, over-skilling and under-skilling are also a major concern", he added. "To fight with the climate change and associated threats, we MUST need low carbon technologies and the relevant skills to address the issue" Dr Chidambaram said. Further in his speech he laid his views that skill conclave under One Week One Lab program has been good initiative and such programs will be very helpful to young generation that will help the country to attain a technological leadership position. Several renowned scientists, administrators and industry invited experts including Dr D K Aswal (Former Director, CSIR-NPL), Priya Vyas (Springer Nature), Dr H C Kandpal also delivered lectures on the occasion. The conclave included a series of breakout sessions and panel discussions, which allowed participants to share their ideas and experiences for the remedial measures to the underlying problems.

A social awareness demonstration by Dr. Bipin Kumar Gupta was organized to help people spot difference between fake and real currency notes and to create awareness among the people to raise their understanding of Indian currency. Around 100 devices were distributed among the common people, which can be utilised for checking fluorescent features of Indian currency. In this programme, an initiative was taken to train 25 visually challenged young women from All India Confederation of the Blind Braille Bhawan, Rohini Sector 5, New Delhi, for checking the Indian currency on their own as a part of the demonstration. It was also demonstrated that Indian currency includes the security features for visually impaired people. The event concluded with cultural evening in which Dr Diwakar Sharma and group mesmerized the audience with their musical performance on 'Science in Music' followed by the performances of research scholars and children of staff of CSIR-NPL.

Environmental crisis and emerging challenges

■ G L KHAJURIA

There are multihued factors directly or indirectly responsible for ever-deteriorating natural quality of congenial environmental globally. As a consequence, therefore, there is ever-escalating environmental crisis. The main cruxes arising out of the environmental degradation are predominantly the effects of green house, (emission of cholouro-flora - carbon-CFs, ever-mounting global warming, apart from many more factors. And in the first place comes anthropogenic activities giving rise in the air concentration of carbon dioxide (Co2), methane (CH4) Nitrous oxide (N2O) and water - vapours. The increase in concentration of CO2 is due to fossil fuel burning whereas the rise in the concentration of methane (CH4) is as a result of expansion in the agricultural activities. However, the ever-challenging crisis on environment is evidenced through the regional manifestation which though, of course, is impacting the entire globe.

The mountainous regions all over globe constitute 20 per cent of the terrestrial area which provide direct support system to around 10 per cent of world population. These as well subsist and sustain many other activities such as forestry and agriculture and other energy resources. And in addition, there are active elements of terrestrial environment which provide and play very pivotal role in the global environmental systems at large. The contemporary research insights spare no room any more for skepticism so far as the general rise in mean surface temperature at global, regional and local level is concerned.

Though strange it may sound but too true that global warming in its complex form also to a larger extent impact the climate change-the biggest challenge of the current century. It has also been scientifically proved that the human activities affect six out of seven most predominant factors viz CO2, CH4, N2O CFC's emissions and water vapors. Apart from these, halocarbons which, of course, are of human origin occurring from cooling agents and other compound pollutants, which are the most hazardous. All these halocarbons are responsible for atmospheric warming. And some halocarbons persists over 10000 times more than CO2. These are responsible for trapping heat which gives impetus for global warming. The enviro-scientists have established that halocarbons

are long lived persisting for hundreds and thousands of years when once released into the atmosphere. And amongst these halocarbons are virtually immortal, persisting over a period around 50000 or so.

Whereas CO2 is measured in parts per million, compared to methane (CH4) which is measured in parts per billion but astonishingly halocarbons are too far ahead being measured in parts per billion. The scenario is pernicious one by all accounts and is quite challenging under the present environmental crisis as most of the enviro-scientists have predicted that earth's temperature shall soar from 1.50c to around 4.50 c by ending 2030. If such emissions continue to be so with such a pace, it would be a catastrophe globally. Rise of earth's temperature, to the extent of 1.50 deg C, is insignificant as it had rather been together than any temperature change experienced during the last 10000 years. Global warming would thus mean shorter cold seasons and longer warmer ones. The winter in northern region will be warmer and the summer longer which consequently would have a very adverse effect on the forests and the agriculture in particular which would rather be disrupted adversely. As a consequence, therefore, extreme weather conditions would be a common phenomenon which as a result would tantamount to destruction of all bioform whether on land or seas. The enviro-scientists have conducted detailed studies and documentations and arrived at the conclusion that carbon induced global warming is a red signal for all the nations across the globe.

The ozone layer encircling this bio-sustaining planet earth, as we all well know is the only protective layer shielding all bio-forms and by the impact of ever-escalating global warming shall tantamount to puncturing and widening its hole with the revolving wheel of time and all living creatures shall be pernicious breeding apocalyptic consequences. Is it not the biggest challenge for already degrading environment facing the current crisis of cataclysms? Another grave challenge to the environment is consistent with unpredictable weather conditions ensuing from global warming. If there are rains, these are of unprecedented nature resultantly wrecking havoc wind-cum-thunderstorms lightning and fast winds with large scale landslides and mass movement of soil in conglomeration with multi-tued material that confronts floods fury in rivulets, ravines

and rivers which take huge toll of lives together their belongings. The losses of men and material in the low lying are quite unimaginative and incalculable. The rivers in spate flow down into seas an oceans causing thereby uprising in their water level.

Similarly, global warming takes its other forms by the melting of snows and glaciers hugely contributing their water in the same fashion thus up rings in seas, oceans and Islands. The enviro-scientists have documented and reported that if the sea level rises accruing from such floods continued, it will tantamount to submergence of sea shores ultimately creating havoc. The latest reports have estimated that sea-level rise upto more than 99 cm.

And if same remains the situation, it is estimated that a third of Florida (USA), Parth (Australia), parts of Netherlands and almost half of Mumbai would most probably be under sea water. Is it not a challenge of environmental crisis looming large in the years ahead. Astonishingly enough, Perth in Australia is now afoot all out precautions to slow down emissions of green house effects all around coastal areas. Bangladesh, Maldives, Egypt and Indonesia are also apprehended to be plunged in the sea water. All the coastal areas viz. Anglican the Thames Estuary in United Kingdom and most of the low-lying cities across the globe including New orleans, Miami and Shanghai will also face the same sort of situation. Under such an apocalyptic, scenario, major challenging threats seem to be in offing in the apprehending environmental crisis. And now of the latest on the October this year when United States coastal area was bared by deadly Hurricane Mathew which sounded a serious signal around the coastal area and created panic when schools were closed and areas near, the coast evacuated. The challenges of environmental crisis shall further be off shooting major challenges in respect of intensity of rainfall and its variable locations. Some of the areas would be experiencing unprecedented rains, whereas other areas there will scanty rainfall or droughts resulting in boosting of forests and agricultural productivity.

(The author is former Deputy Conservator of Forests, J&K).

Eid-ul-Fitr: A day of rejoicing and celebration

■ OMKAR DATTATRAY

Eid-ul-Fitr is one of the two major festivals celebrated by Muslims around the world. It can be translated as 'the feast of fast-breaking' as it commemorates the end of the holy month of Ramadan in which Muslims who are able to do so will fast from dawn to dusk for a month. Eid-ul-Fitr is celebrated by holding a community-wide prayer service in an open field or large hall which often attracts a large number of attendees, even those who do not typically attend prayer services throughout the year. Eid in fact implies kindness, sympathy, and empathy for the poor; widows and weak. It teaches us simplicity, brotherhood, unity and peace. It also ordains us to help the poor, weak, widows and those who fail to celebrate the EID festival on their own and therefore they need your help and attention so that they also will celebrate the festival of Eid with happiness and joy. People wear new or clean clothes to offer prayers on various cultural forms and religiously there is a special mandatory charity called Zakat-ul-Fitr that helps ensure that all can afford to participate in the festivities. The prayer consists of two cycles of standing and reciting the Quran, bowing and prostrating in glorification of Allah, followed by sermon and supplications all led by an Imman. After prayers and throughout the day, it is common to visit family, neighbors, friends and exchange gifts. The names of this festival differ from culture to culture and country to country, though the Arabic "Eid -ul-Fitr has become the standard in North America. Eid-ul-Fitr 2023 was celebrated on April 22, 2023. As Muslims across the globe prepare for the holy month of Ramadan to end, they

also gear up to mark and celebrate the festival of Eid-ul-Fitr. Also known as Meethi Eid or Eid-ul-Fitr, the festival marks the end of the holy month of Ramadan, during which Muslims observe/hold dawn to dusk fast for a month and engage in acts of worship and spiritual reflection. Eid -ul-Fitr is a joyous occasion, one of the most significant festivals of the Muslims and is celebrated throughout the globe. The celebration of this festival ensures that the believers follow strict discipline, self control, patience, avoid negativity and worship Allah and all this is possible because Muslims observe month long fast of Ramadan and remember God and do right things and abjure enmity and bad deeds and thus Ramadan and its culmination and observing Eid-ul-Fitr leads to simplicity in the lives of people and the Muslims help their community members with financial help especially those who cannot enjoy the festivities, joy and preparing of the delicacies on the day of Eid.

The festival of Eid-ul-Fitr teaches us fellow feeling, sympathy, equality and unity and so it has great significance in the life of Muslims who celebrate this festival with great pomp and show every year after the culmination of holy Ramadan, Muslims celebrate Eid. The festival teaches us how to help the people who are poor and in need of help and thus it teaches people to help others who are in need of help. Eid-ul-Fitr also helps people to ensure equality and to do good to the people in need. Eid-ul-Fitr marks the end of Ramadan, the Muslim holy month of fasting and is celebrated during the first three days of Shawwal, the 10th month of the Islamic calendar. After Ramadan month of fasting, Muslims cele-

brate Eid-ul-Fitr with feasts and family visits. The start of the festival is traditionally based on sighting of the new moon, which vary according to geographic location. Moon has been cited in India, as such Eid-ul-Fitr will be celebrated today on 22rd of April 2023 including in Jammu and Kashmir. The Muslims worldwide are getting ready to celebrate Eid-ul-Fitr as the month-long fasting of Ramadan draws to close. The date of Eid varies, depending on the sighting of the moon but this year, Eid-ul-Fitr was celebrated with fervor and traditional gaiety. In Poonch, Army officers and BDC chairpersons and many people from Muslim community participated in Iftaar party after praying for peace, happiness, prosperity and good health of all countrymen in the nation. The spirit behind organizing the event was to celebrate the core values of our nation, synopsized by unity in diversity, brotherhood and secularism.

The night before the Eid-ul-Fitr is called moon night and on this night moon is sighted. If moon is sighted, Muslims and others as well greet each other for Eid-ul-Fitr. Eid-ul-Fitr features two to three days of celebrations that include special morning prayers as the Muslims gather at Eid Gah and offer congregational prayers and the Muslims greet each other and also hug each other. The Hindus and Sikhs also greet Muslim brothers on the occasion of Eid and they also visit the places of Eid Namaz and greet their Muslim brothers. Muslims are seen dressed in new clothes and they make merry and enjoy the Eid festivities and wish each other and thank the Almighty for giving them patience and endurance for fasting in the holy month of Ramadan. Eid-ul-

Fitr is in fact the occasion for making merry and feeling joyous because Muslims fasting comes to end with celebration of Jamat-ul-Vida and they thank Almighty for giving them courage to fast for the month. On this auspicious occasion people greet each other with 'Eid Mubark' meaning blessed Eid and will formal embraces. Sweet dishes are prepared at home and served to friends, neighbors and relatives. Eid-ul-Fitr is one of the two major festivals of Muslims celebrated across the country and also worldwide. It can be translated as the feast of fasting as it commemorates the end of the holy month of Ramadan in which Muslims who are able to do so will fast from before dawn until other sunset. This festival and holiday is celebrated by Muslims worldwide because it marks the end of the month long dawn to dusk fasting of Ramadan. It falls on the first day of Shawwal in the Islamic calendar; it does not always fall on the same Gregorian day as the start of any lunar Hijri month varies based on when the new moon is sighted by local religious authorities. The day is also called Lesser Eid or simply Eid. In brief Eid-ul-Fitr is the day of rejoicing and joyous occasion to offer Namaz and meet people and greet Muslim brethren on this occasion. Let us pray Allah for the peace, security, happiness, prosperity and good health of not only the people of Jammu and Kashmir but pray for the whole world happiness and peace. This in fact is the festival of peace, brotherhood, happiness and prosperity and unity and so Muslims should celebrate Eid in the spirit of brotherhood and communal harmony and mutual brotherhood. Eid greetings to all countrymen.

(The author is a columnist, social and KP activist).

'Act boldly, innovate broadly, implement equitably'

■ DR PARVEEN KUMAR

International days are occasions to educate general public on issues of concern, to mobilize political will and resources to address global problems and to celebrate and reinforce achievements of humanity. The existence of International Days predates the establishment of United Nations, but the UN has embraced them as a powerful advocacy tool.

Every year certain days, weeks or months and even entire years are designated for a specific cause. United Nations promotes international awareness and actions on these specific causes. April 22, celebrated every year as 'Earth Day' globally is one such day dedicated to the planet on which all of us live, the only place in the known universe confirmed to host life. Unfortunately, human beings have irrevocably upset the balance of nature and, as a result, the world is facing the greatest rate of extinction since we lost the dinosaurs more than 60 million years ago. Unlike the fate of the dinosaurs, the rapid extinction of species in our world today is the result of human activity. The unprecedented global destruction and rapid reduction of plant and wildlife populations are directly linked to causes driven by human activity viz. climate change, deforestation, habitat loss, trafficking and poaching, unsustainable agriculture, pollution and pesticides to name a few. The impacts are far-reaching.

An important component of our planet is our land which we put to different uses. The land represent a natural ecosystem composed of many elements those exhibit diverse bio physical characteristics that are interlinked and interdependent. It also supports a number of economic activities and influences health and nutrition of man and animals. Due to poor soil and water management practices about 40 to 50 per cent of the land area suffers from degradation of one or the other kind. The indiscriminate use of plant protection chemicals during green revolution and thereafter in states like Punjab, Haryana, and Uttar Pradesh to increase the crop yields has led to water pollution. Such is the extent that drinking such polluted water has resulted in many deadly diseases among peoples in the states like Punjab and Haryana. A train runs especially from the Bathinda to Ganga Nagar in Rajasthan for their treatment. This train is given the name of 'Cancer Train'. Temperature is on the rise. Sea levels are increasing. Floods and droughts are on the rise. Coastal areas are now unsafe for human settlements. Crop failures accompanied with decrease in productivity of crops as well as livestock is adding to the food insecurity of the region. If we do not act now, extinction may be humanity's most enduring legacy.

Earth Day is an annual event celebrated globally to support environmental protection. The day is celebrated on 22nd April every year. Originated in 1970, the event is now coordinated and celebrated internationally by the Earth Day Network in more than 193 countries across the globe. Earth Day was celebrated in April 1970 for the first time to bring the environmental condition into the national agenda. On the first Earth Day, 20 million Americans took part in different U.S. cities. The first Earth Day was held on April 22, 1970, when San Francisco activist John McConnell and



Wisconsin Senator Gaylord Nelson separately asked Americans to join in a grassroots demonstration. Dealing with dangerously serious issues concerning toxic drinking water, air pollution, and the effects of pesticides, an impressive 20 million Americans 10% of the population ventured outdoors and protested together. President of the United States of America Richard Nixon led the nation in creating the Environmental Protection Agency, which followed with successful laws including the Clean Air Act, the Clean Water Act, and the Endangered Species Act. Environmental Activist McConnell originally had chosen the spring equinox (March 20, 1970), but Nelson chose April 22, which ended up becoming the official celebration date. (Given that the date of the spring equinox changes over time, it may have made things more complicated to go with the astronomical event rather than just a calendar date.)

The themes of the international days are always linked to main fields of action of the United Nations, namely the maintenance of international peace and security, the promotion of sustainable development, the protec-

tion of human rights and the guarantee of international law and humanitarian action. This year the theme of Earth Day is continuation of previous year's theme i.e 'Invest in Planet'. It does not means financial investment, but investment in promoting and propagating climate smart technologies, conserving biodiversity and protecting the rights of tribal and indigenous communities that do a lot in preventing the loss of biodiversity and at the same time motivating and adopting the judicious use of our natural resources. The theme this year has been decided keeping in view the deteriorating condition of our planet and the immediate action needed on our part to restore the health of this planet. This year theme of the Earth Day 'Invest in Planet' also focuses on natural processes, emerging green technologies and innovative thinking that can restore the world's ecosystems. The day also demands a commitment from all of us towards climate and environmental literacy, climate restoration technologies, reforestation efforts, regenerative agriculture, equity and environmental justice and sustainable development based on efficient use of natural resources. Already we have robbed our planet earth of its valuable biodiversity, depleted its natural resources by their overuse ad misuse.

Global warming, pollution and deforestation are some of the problems routinely discussed since they pose a major threat to nature. Over 1 billion people spread across 192 countries participate in Earth Day activities each year. This makes the day as the largest civic observance in the world. Earth Day is recognised as the largest civic event in the world. Earth Day educates us about what we have and what we are losing by acting in ways that aren't environmentally friendly or energy efficient. It reminds us that we need to take action now to protect our environment and various issues like climate change, global warming and many others before it is too late. Today, not only is Earth Day a day meant to increase awareness of environmental problems, but also it is also becoming a popular time for many communities to gather together to clean up litter, plant trees, or simply reflect on the beauty of nature. This day also helps in analyzing the condition of the planet and to discuss a unified response to save the climate. It is a reminder that clean air, flourishing forests, and water are crucial for life on Earth. Saving our earth and its environment becomes highly important as it provide us food and water to sustain life. Our well-being solely depends on this planet it gives food and water to all living things to it is our responsibility to take care of it. Earth Day allows us a day each year to reflect and remember the significance of the health of the planet and what we can all do to help ensure that health of all of us. According to Kathleen Rogers, President of Earthday.Org, 'by engaging governments, businesses, institutions, and the more than 1 billion people who participate in Earth Day annually we can solve the world's greatest problem: climate change.' There is unlimited opportunity to right the wrongs of past actions and build a new version of society. Once again, we must act boldly in order to achieve a successful outcome. We should innovate in a broader sense and have to put our ideas into practice in an equitable manner.

