SWACHHATA VOLUNTARISM **SCRIPTS A NEW RECORD**

he journey of Swachh Bharat witnessed a new history being scripted. Crores of citizens came forward to L offer voluntary shramdaan in a mega cleanliness drive across the nation. Prime Minister Narendra Modi joined the popular fitness influencer Ankit Baiyanpuriya for the shramdaan. He tweeted, " as the nation focuses on Swachhata, Ankit Baiyanpuriya and I did the same! Beyond just cleanliness, we blended fitness and well-being also into the mix. It is all about that Swachh and Swasth Bharat

Owned and led by the citizens, this mega cleanliness drive has seen participation from all States & UTs, villages and cities. The aggregates indicate the participation of nearly 8.75 crore people participation in over 9 lakh sites. Cleanliness drives were taken up on streets, highways and toll plazas railway tracks & stations, toll plazas, health institutions, anganwadi centres, heritage and tourist locations, residential colonies, water bodies, places of worship, slums, market areas, airports and surrounding areas.

On this day of many firsts, the mega cleanliness drive across the nation got an impetus with sanitation being the great unifier for the nation, transcending Panchayats, Municipalities, districts and State boundaries.

Various organizations came forward with unique activities Union ministers joined the shramdaan at various sites too. The 'whole of govt approach' resulted in smooth facilitation for the shramdaan volunteers at lakhs of sites at the same time. There was a sense of achievement when small groups of dedicated volunteers were able to clean up their chosen sites. The role of Panchayats, urban local bodies & district administration was more of a facilitator. This incredible hour saw people and civil society organizations taking initiatives for garbage collection, transportation, safe disposal etc. Each of the shramdaan site was organized by adopting principles of zero waste and plastic free.

After the Call to Action by the Prime Minister during the 105th Mann Ki Baat, the Mission swiftly created an enabling technology infrastructure, where people could register, identify and select their preferred site for shramdaan. A robust backend infrastructure was also put in place, allowing city officials, civil society organisations, corporate bodies etc., to register. Garbage vulnerable sites were identified and uploaded on portal which helped public to select and join sites of their choice.

Mahatma Gandhi-An apostle of peace and Non-violence

■ GL KHAJURIA

oday, the people of the world realize the mettlesome of Gandhi Ji's power of peace and non-violence. He says our Rishis who discovered the laws of non-violence amidst violence were greater geniuses than Newton. They were themselves greater warriors than Wellington, having themselves known the use of arms. They realized their uselessness and taught a weary world that its salvation lay not through violence but through non-violence. Non-violence in its dynamic condition means conscious suffering. It does not mean meek submission conscious suffering will of the evil doer, but it means putting of one's whole soul against the will of the Tyrant working under this law of our being. It is possible for a single individual to defy the whole might of an unjust empire to save his honour, his religion, his souls and lay the foundation for that empire that for that empire's fall or his generation.

India never intended to wage war against any nation. India is a peace loving country and the way she can promote peace is to offer successful resistance to her exploitation by peaceful means that is to say she has achieved independence by peaceful means. If she could do this, it is the largest contribution that any single nation has ever made toward world peace.

Gandhi Ji further emphasizes that India is not a nation of coward is proved by bravery and daring of her martial races whether Hindu, Muslim, Sikh or Gorkha. His point is that the spirit of fighting is inher ent part to play in the evolution of the world. Time alone can show what is to be her destiny.

As we well know that the father of nation, Mahatma Gandhi was born on 2nd October 1869 at Porbander in Guirat. His full name was Mohandas KaramChand Gandhi. His father Karamchand Uttamchand Gandhi who served as Dewan (Prime Minister). Gandhi Ji was the most prominent person ever born in the entire universe and that is why he is called as the Rashtra Pita. He was having multifaceted personality as a politician, statesman, social reformer, a freedom fighter and a above all a man of higher visionary. Albert Einstein has as thus very rightly said that future generation would wonder if ever such a man has walked on the

He was a great philosopher and prolific writer and has to his credit most of the commendable and unforgettable books. His autobiography my experiments with truth is exceptionally beyond all dimensions memorable testament where his truthfulness are the cornerstone of his multidimensional thinking and person-

ality in an open and candid manner. Mahatma Gandhi was an international personality and that is why this day of 2nd October is dedicated to him as the day of International day of peace and nonviolence celebrated globally.

Mahatma Gandhi never had in his vision that there should be no partition and India and Pakistan should coexist peacefully and amicably with unity and consolidation which never came to his dreams.

Unfortunately after the independence, the country was bifurcated into India and Pakistan enfeebled by a six days fast ha had kept to persuade Hindu and muslims to desist from further bloodshed, mahatama Gandhi was on way to for evening prayers at the compound of the Birla House In New Delhi. It was around 5 on that cold evening of January 30th, 1948 that Nathuramgodse appeared on the seen and he touched the feet of Mahatma reverently and thence fired four shots at him point blank.

Gandhi ji felt to the ground, Aha-ram were the last words echoed by the Mahatama. A holocastic scenario pervaded over Indian horizon and left us all wailing and saddest day as well remembered as the martyrs

His aim shall be remembered throughout the world so long as the sun shines, moon soothes and the stars continue glittering in the cosmos.

Conclusively, therefore, let us solemnly pledge to imbibe the life and the teachings of Mahatma in the years ahead.

It would be the most befitting tribute to the extraordinary man ever to be born on the planet earth. Jai

(The Author is Deputy Conservator of Forests).

Climate Smart Horticulture: The Need Of Hour

■ PROF. PARSHANT BAKSHI, REETIKA SHARMA

s per the report of United Nations Conference on Trade and Development (UNCTAD), India will be the effloresce economy in the world even with a sluggish growth rate of 6.7% but it is stock-still tenacious by poverty and hunger. This is evident from Global Hunger Index during 2022, in which India ranks 107out of 121 qualifying countries. It can be attributed to the ever increasing population of the country, which has resulted in increasing demand for food and further aggravating the food security crisis in the country. Another problem of land fragmentation is a result of changing land use for developmental purposes there by leaving the farming household with marginal land to cultivate. These fragmented lands are not economically feasible to grow fruit crops.

Climate change is an enormous concern of the world. An increasing concentration of carbon dioxide, rising earth's temperature, ozone depletion are among the major issues associated with climate changes which directly or indirectly cause negative impacts on quality attributes and nutritional quality of fresh fruits and might increase severe production problems. In temperate fruit crops, time change of different physiological activities i.e shifts in phenology is oversensitive to change in climate or likely to have baneful effects on endurance of species and thereby on biodiversity. Changes in phenology can affect reproduction because of discrepancy between plants and pollinators. The quantitative and qualitative attributes of temperate fruit crops can be directly and indirectly affected by exposure to high temperatures and elevated levels of carbon dioxide and ozone. Photosynthesis is directly affected by temperature, causing alteration in activity of antioxidants, firmness, flavonoid contents, sugars and organic acids and on the other side carbon dioxide concentration in atmosphere also rise persistently affected post-harvest quality of fruits. Ozone depletion can also results in the decline of photosynthetic rate, growth, biomass accumulation, increase in vitamin-C content and reduction in volatile esters emissions. It has also alters the pattern of blossoming, bearing and therefore, yield and quality of fruits continuously deteriorates under North Western Himalayan condition of India.

Commercially, winter chilling requirement is one of the major methods for successful cultivation of temperate fruit crops, which is specific for every tree cultivar. Insufficiency of chilling may cause abnormal pattern of bud-break in temperate fruit trees, which can substantially reduce yield and fruit quality. A radical change in climate action won't save glaciers which results in continuously melting of ice cap in the Himalayan regions, reduces chilling requirements for the

flowering of many temperate fruit crops like apple, cherry, pears etc. and also reducing the accumulation of heat shock proteins. In tropical fruit crops, the rind colour is the major problem. The warm temperatures impeded with the lack of chlorophyll as well as with the increase of carotenoids. Thus, fruit in the tropics remain pale and greenish; oranges and mandarins, in particular, do not attain their attractive rind colours. The declining of air and soil temperatures marks the onset of colour changes in subtropical regions, especially in autumn season. The high temperature and humidity result in tender, rapidly senescing fruit which has low storage potential and is highly susceptible to peel blemishes.

Climate Smart Horticulture is an integrated approach that help the people who manage horticultural systems respond effectively to climate change. Climate smart horticulture has helped in increasing the productivity and income of farmers and in nearing to the goal of food and nutritional security through adaptation and sustainable growing techniques. It has been estimated that by 2050 the population of world will be 9 billion and ever increasing need to raise the agricultural production by 70 % so as to meet the basic demands of food, feed, fuel and fiber. The use of techniques like yield monitoring in fruits and nuts, precision irrigation, robotics, wireless connectivity and unmanned aerial systems (UAS) helps in collecting the eco-physiological information that can be used in breeding programs to obtain improved cultivars, reduce stress in irrigation, tackle physically demanding tasks, analyzing data related to crops, soil, field, livestock and storage facilities, predictive modeling and planning and measuring plant canopy, height and structural parameters. A yield monitor by itself can provide useful information and enhance on-farm research. Yield data can be accumulated for a specific load or field, thereby facilitating the comparison of hybrids, varieties, or treatments within test plots.

Precision irrigation can improve horticultural sustainability in respect of better water use efficiency and minimize adverse environmental impact, thereby helping to manage the orchard variability of water in turn improving the productivity of horticultural crop. The economic benefit of precision irrigation lies in reducing the cost of inputs or improving the yield for the same input. Wireless connectivity or we say that wireless sensor networks can play vital role in adjusting and managing the water resources for irrigation, understanding the variable production factors in fruit crops, assess the optimum point for harvesting, estimating fertilizer requirements and to predict crop performance more accurately. Unmanned aerial vehicles, commonly named drones collect raw data and process it to provide information regarding vegetation indices like leaf area. phenology and yield, plant height and density, plant scouting, analysis the soil heath and also helps farmers to optimize the use of inputs such as seeds, fertilizers, water and pesticides more efficiently, allowing timely protection of crops from pests, saves time, reduces overall cost in farm production and secures better yield and quality fruit crops. Change of fruit crop and varieties which are able to withstand biotic and a-biotic stresses offer greater climate resilience. Minimizing impact of extreme weather event by modifying micro-climate both against heat and cold stress by adapting techniques like overhead irrigation, midcanopy sprinkler, shade-net, reflecting materials, water channels, canopy management etc. helps in reducing the pest and diseases. Sound weather forecasting system is very important for adjusting field operation to minimize damage to the crops.

Protected cultivation provides modified micro-climate and crop is less exposed to weather extremities. The production of large scale quality planting material, high density planting in fruit crops like mango, guava, banana, citrus, apple and papaya have been developed by using dwarfing rootstock, inter-stocks and scion varieties for production of quality fruits and have great adaptation to climate change but also accumulates biomass and soil carbon per unit area. Climate change impacts farm production and food systems, and thus the approach to transforming horticultural systems to support global food security and poverty reduction.

Climate change introduces greater uncertainty and risk among farmers and policymakers, but need not lead to analysis. An integrated, evidence based and transformative approach to addressing food and climate security at all levels requires coordinated actions from the global to local levels, from research to policies and investments, and across private, public and civil society sectors to achieve the scale and rate of change required. With the right practices, policies and investments, the horticulture sector can move to Climate smart horticulture pathways, resulting in decreased food insecurity and poverty in the short term while contributing to reducing climate change as a threat to food security over the longer term. The implementation of horticultural policies can be drastically improved to support the farming community and thereby providing livelihood, increasing their incomes and avoid negative social and cultural impacts, such as loss of land tenure and forced migra-

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Lal Bahadur Shastri-the unsung **Hero of India**

have celebrated the birth anniversary of Lal Bahadur Shastri on 2rd October 2023 along with the celebration of Gandhi Jayanti. But the celebrations of the birth anniversary get eclipsed due to the Gandhi Jayanti celebrations .Lal Bahadur was the third prime minister of independent India .Shastri was the man of humble beginning and he came from a poor family background . His simplicity and high thinking has no match as he lived a life of a poor man despite being the prime minister of India. It is very unfortunate that this great national leader is seldom remembered and his contribution to the country goes unnoticed ,with the result that Shastri is the unsung and unwept prime minister and leader of India. He had profound love for science and the armed forces and the farmers who are the backbone of Indian economy and that is the reason that Shastri had given the slogan of Jai Jawan Jai Kissan .Shastri was a cabinet minister in the government of Nehru and Nehru used to refer to Shastri as the scientist in the cabinet because he was holding a bachelors degree in science .After the death of the first prime minister J L Nehru ,Shastri became the second prime minister of India. The contribution of Shastri is great in the freedom movement of India. Lal Bahadur was an exemplary leader and one of the greatest reformers of India. His life and work is a great inspiration to the people but still he is not given the proper place which he deserved in the national life. Shastri was a epitome of simplicity and pragmatism .He was of the scientific bent of mind and had great regard for scientist fraternity He was really a practical leader who worked the unliftment of the poor, farmers and the backwards sections of the society.

Shastri was a down to earth leader and was more connected with the roots and he was a great nationalist and patriot par excellence. Lal Bahadur Shastri was born on 2nd October 1904 and he passed away on January 11 1966. Shastri was a great Indian politician and statesman who served as the second prime minister of India from 1964 to 1966. He was also the sixth home minister of India from 1961 to 1963. Shastri was born to Sharada Prasad Srivastava and Ramdulari Devi in Mughalsarai on 2.October 1904 .Shastri's thoughts were influenced by readings about Swami Vivekananda ,Mahatama Gandhi and Annie Besant. Deeply influenced and impressed by Gandhi, he joined the Indian independence movement in 1920,s.He held prominent positions in the Indian National Congress .Following the independence in 1947,he joined Indian

government and became one of the key ministers in Nehru's cabinet ,first as Railways minister (1951-56) and then got numerous other prominent positions ,including the home minister .Shastri was the pioneer of white and green revolution in India. His green revolution of 1965 led to the increase in the food production .especially in the states of Punjab ,Haryana and UP .He led the country in second India-Pakistan war .His slogan "Jai Jawan, Jai Kissan" became very popular during the war .The war formally ended with the Tashkent Declaration on 10th July 1966 and unfortunately this great man of masses died on 11th July 1966 and whole India mourned on the untimely and sudden death of Shartri in Russia .He will be remembered for his service to the nation for generations .In April 1906, when Shastri was hardly 18 months old, his father , who had only recently been promoted to the post of deputy tehsildar, died in an epidemic of bubonic plague. His mother went to her father's house and Shastri and his sister grew up at Mughalsarai .Later Shastri took a great interest in freedom struggle and study its history and works of its noted personalities including those of Swami Vivekananda Mahatma Gandhi and Annie Besant .Inspired by Gandhi's call for students to withdraw from government schools, Shastri withdrew from Harish Chandra High school, jumped in the freedom movement. He was soon arrested and jailed but was then released as being still a minor . Shastri graduated in Benares with a first class degree in philosophy and ethics in 1925. He was given the title shastri and later it became his surname .Shastri took active part in the freedom movement and he was deeply impressed by the life and teachings of Gandhi. As prime minister Shastri promoted white revolution -a national campaign to increase the production and supply of milk-by supporting the Amul milk cooperative of Anand, Gujarat and creating the national dairy development board. Underlining the need to boost India's food production, Shastri also promoted the Green Revolution in India in 1965. J.L. Nehru died in harness on 27th May 1964. Then congress party president K.Kamaraj was instrumental in making Shastri prime minister on 9. June 1964. Shastri though mild-mannered and soft-spoken ,was a Nehruvian socialist and thus held appeal to those wishing to prevent the ascent of conservative right-winger Morarji Desai .In his first broadcast as PM ,on June 11,1964,Shastri stated, "There comes a time in the life of every nation when it stands at the cross roads of history and must choose which way to go .But for us ,there need to be no difficulty or hesitation, no looking to right or left. Our way is straight and clear-the building up of a socialist democracy at home with freedom and prosperity for all ,and maintenance of world peace and friendship with all nations. Lal Bahadur Shastri's tenure witnessed the Madrass anti-Hindi agitation of 1965 . To calm the situation Shastri gave assurance that English would continue to be used as the official language as long the non -Hindi speaking states wanted .Shastri continued Nehru's socialistic economic policies with central planning . While speaking on the chronic food shortages across the country, Shastri urged people to voluntarily give up one meal so that food saved could be distributed to the affected populace .However he ensured that he first implemented the system in his own family .He went on air to appeal to his countrymen to skip a meal a week. The response to his appeal was overwhelming. Many parts of the country observed Shastri vrat, and even the restaurants and hotels downed their shutters on Monday evenings. Though he was a socialist, Shastri stated that India cannot have a regimented type of economy. His government passed the National Agricultural Products Board Act and was responsible for setting up the Food Corporation of India under the Food Corporation Act 1964. The former PM Lal Bahadur shastri was one of those great Indian's who had left an indelible impression on our collective life .Shastri's contribution to our public life was unique in that they were made in the closest proximity to life of the common man in India .Shastri was looked upon Indian's as one of their own ,one who shared their ideals ,hopes and aspirations. Under Shastri's leadership India faced and repulsed the Pakistani invasion of 1965 It was not only a matter of pride for the Indian army but also for every citizen of the country .His slogan of Jai Jawan ,Jai Kissan! reverberates even today throughout the length and breadth of the country .Unfortunately this great leader and the PM died in Tashkent Uzbekistan -Sovit Union on 11 January 1966, one day after signing a peace treaty to end the 1965 Indo-Pakistan war .He was eulogized as a national hero and the Vijay Ghat memorial established to his memory. The stature and status as well as the contribution of this great man was big ,but alas he is not given the due respect and reverence which he deserved .Shastri stands tall despite being unsung and unwept .May Shastri continue to inspire the Indians for many years to come. (The author is a columnist,

social and KP activist)

The India-Canada Diplomatic Standoff

■ MEHDI SARVER

he recent statement by EAM S Jaishanker that this is still a world of double standards at a Ministerial Session titled L 'South Rising: Partnerships, Institutions and Ideas' hosted by the Observer Research Foundation, a few days after Canada has accused India of killing it's civilian in Vancouver in June and termed it an attack on their sovereignty and violation of international rule of law, cannot be merely taken coincidental. In a veiled attack he criticizedWest for its hypocritical approach towards developing world. Terming these allegations "absurd" and "motivated," New Delhi has reacted by accusing Ottawa of not acting against the Khalistan separatists in Canada and not sharing any specific information on the killing of Nijjar. This diplomatic escalation has given birth to an immediate crisis in the form of a set of problems faced by the students there; four out of ten international students in Canada are Indians. The truth is that though India is not going to incur losses bilaterally but definitely this issue is potentially strong enough to hurt its emerging image in the landscape of the world, particularly post a successful G 20 declaration in New Delhi. Estimates suggest that of the about 20 lakh Indian diaspora, only about 8 lakh are Sikhs. Of which, Indian estimates say, only about 1% - 8,000-9,000 people - are pro-Khalistan radicals. But this small population of Khalistanis control 12-15 gurdwaras, where they generate funds and organize political mobilization by voting en bloc for Canadian political candidates. The constituencies in which they have a say are mostly in Brampton in Ontario province, and

Vancouver and Surrey in British Columbia. It is reportedly said that Jagmeet Singh a person of Indian origin and NDP leader has been instrumental in influencing Canadian foreign policy in respect to India as his party stands a coalition partner in the otherwise a minority incumbent govt. As per economic times, India had engaged with certain countries, including Russia, on Jagmeet Singh's pro-extremist ideologies and Russia has banned Jagmeet's entry into its territory based on inputs provided by New Delhi. Jagmeet Singh has also been noticed meddling in the pro-Ukraine campaign often targeting Russia, making him unpopular in Moscow. This India-Canada diplomatic row has brought the 'Five Eyes' intelligence alliance into the spotlight. A top US diplomat said last week it was "shared intelligence among Five Eyes partners" that prompted Canadian Prime Minister Justin Trudeau to publicly allege last Monday that "Indian agents" were involved in the killing of Khalistani extremist Hardeep Singh Nijjar on Canadian soil. It is pertinent to mention here that when the five-nation alliance took final shape, the US was fighting the Cold War with the Soviet Union. According to a report that appeared Financial Times, several members of the Five Eves Alliance had already raised the killing of Hardeep Singh Nijjar through their leaders with Modi at the G 20 meet.

It is obviously evident that mentioning of this issue at such a crucial juncture has not occurred without an oblique purpose - to mount pressure on India so as to disrupt the meeting and discourage it in evolving a concensusially reached declaration particularly on Ukraine war and desirably effecting it in their favour

The question here arises as to why Canada accused India publicly without a conclusive evidence on table. What are the circumstances and pressures that compelled it to take such an extreme step without having made available a concrete evidence to the corresponding Indian authorities and perusal of the issue bilaterally?

The ongoing conundrum between India and Canada is in actuality reflection of diplomatic failure and the resultant outburst of West backed by US who could not digest the Delhi Declaration particularly on account of Ukraine Problem and acceptance and articulation of the concept of global south. Praised by one and all, Russia welcomed it within an hour and China looks it as a positive signal for the whole world. The west along with US and Canada mainly constituting global north have rightly gauged it as the beginning of the downfall of their hegemony and they will leave no stone unturned to make it unsuccessful in turning out the bedrock in this direction. They are looking forward that India avoids its collaborative relation with Russia. Well it will be interesting to see how India handles this pressure tactics and balancesits interests in its neutrally looking independent foreign policy in the backchannel talks between New Delhi and Ottawa that are being explored via Washington DC as expected.

This issue seems more a manifestation of the North-South divide and the East-West polarization having locus in Russia Ukraine war than appearing to be merely driven and motivated by a Khalistani cause or a country's vote bank.

YOUR COLUMN **World Animal Day**

Today is World Animal Day. The day is a reminder for us to treat our pets and stray animals with respect.

If we look around our neighbourhood and our streets, we will find plenty of stray animals, especially dogs, cats and

cows roaming about. That's no way to show respect to these animals. It's like we have disowned them. Animals enrich us in ways we don't even know.

October 4 is also the feast day of St. Francis of Assisi who loved animals. It is a day to celebrate animal life in all its forms. It is a day to acknowledge the diverse roles that animals play in our lives. It is a day to acknowledge and be thankful for the way in which animals enrich our lives.

World Animal Day is a wonderful reminder of different ways in which animals enhance our lives.

World Animal Day helps bring people together to increase awareness and improve education worldwide so that animals can live the lives they deserve. Together we can change the way the world works and end animal cruelty and suffering

The theme for World Animal Day 2023 is "Great or small, love them all". The mission of this year's World Animal Day is to raise the status of animals in order to improve welfare standards around the globe.