

CLIMATE CHANGE

Climate change refers to alterations in the environmental conditions of the Earth, stemming from both internal and external factors. Over recent decades, it has become a global concern due to its significant impact on ecosystems and life on Earth. These changes have led to the extinction of numerous plant and animal species, underscoring the urgency of addressing this issue.

The recognition of climate change dates back to the last century when the warming of the Earth's surface was attributed to the greenhouse effect. Human activities, such as deforestation, fossil fuel usage, industrial waste, and various forms of pollution, have contributed significantly to this phenomenon. Additionally, natural factors like volcanic eruptions, solar radiation, tectonic plate movements, and orbital variations also play a role in climate change, exacerbating the imbalance in nature.

The consequences of climate change are far-reaching and severe, impacting various aspects of the environment. Rising temperatures lead to the melting of glaciers, rising sea levels, increased CO2 levels in the atmosphere, deforestation, and loss of wildlife. If left unchecked, these changes could result in the extinction of many more species and catastrophic damage to the environment.

However, there is hope for mitigating these effects through collective action. By addressing the root causes of climate change and implementing sustainable practices, we can work towards preserving the Earth's ecosystems and securing a better future for all life forms. Neglecting these problems could lead to dire consequences, including the extinction of humanity itself. Therefore, it is imperative that we take immediate and concerted action to address climate change and safeguard our planet and future generations.

Amit Shah being the Chanakya of 400 Par

OMKAR DATTATRAY

The catchy slogan of 400 Par has not come from thin air or from nowhere. This slogan which today is on the lips of the BJP activists and leaders from the top of the organization to the lowest worker of the party is the brain child of home minister Amit Shah who is rightly called as the Chanakya of not only the BJP but of the Indian politics as well.

Amit Shah has the distinction of being the propounder and advocate of the slogan of 400 Par and he is in fact the Chanakya of 400 Par. It is in fact the Amit Shah who has given to the BJP the slogan of 400 Par and with this catchy and spiky slogan which is attracting huge crowds and has become the central focus of the party, BJP is in a position to beat its political foes easily. It is a slogan to energize the rank and file of the BJP and it is in fact the morale booster of the party.

Amit Shah is the top strategist and master craftsman of the BJP and is the number two in the party and he commands much influence in the BJP and is the big decision maker of the party and is credited for the top decision of removal of abrogation of controversial article 370 of the constitution and it is again Amit Shah who had brought the resolution in Raj Sabha for the abrogation of article 370 which accorded special status and position to Jammu and Kashmir and had got the resolution in this regard passed in both the houses of parliament and thus the article 370 was scrapped on August 5 2019 and it paved the way for the fuller integration of Jammu and Kashmir with the Indian union.

The force behind the much publicized slogan of 400 Par is the brain child of Amit Shah and it is he who is behind the slogan of catchy slogan of 400 Par and with this slogan the opposition parties are confused and they fail to counter this slogan and it is the morale booster to the party activists from top to bottom and therefore Amit Shah can rightly the political opponents and create a place for the BJP in the minds of the electorate and therefore it can be called as the Chanakya of 400 Par and with this crafty slogan the BJP leaders are in a position to beat said that it is Amit Shah who is the force behind the slogan of 400 Par and it is again he who has armed BJP with this slogan which will in due course translate into votes and this 400 par slogan and catchy phrase has attracted the attention of the political parties including the country the opposition.

This 400 Par strategy, phrase and slogan has energized the BJP activists and they are fighting the electoral battle with this handy slogan and it is certain that the BJP will be in a position to fight the opposition and win the crucial general elections and therefore all the BJP leaders are giving top most attention to this slogan and it is doing the function of confusing the opposition and is arming the BJP with the armory of the slogan of 400 Par. Amit Shah had remained the president of the BJP and had energized and expanded the BJP organization and he has been instrumental in expanding the mass base of this cadre based party. He is also credited with winning the 2014 and 2019 Lok Sabha polls and it is expected that he will be able to get the BJP to win the crucial general election of 2024.

Amit Shah is the great planner and organizer of the party and he is also the man who is force behind the coordination of the BJP and therefore he can be credited with making BJP as the top most political organization of not only India but of the world as well. Amit Shah is the mass leader of the BJP and he will influence the battle of ballots in 2024 and will be in a position to work wonders and turn the poll wave in favor of the BJP. Amit Shah is the undisputable Chanakya of Indian politics and BJP and it is he who made the party to win elections state by state and at the national level as well. Therefore Amit Shah is the popular leaders besides the prime minister Modi and thus he is in a position to tide the election wave in favor of the BJP.

Amit Shah has the organizational acumen and administrative attributes and skill to swim the ship of the BJP and take it to the safe shore. Amit Shah is the pilot of the BJP plane and he charts the way to the BJP so that it can defeat the opposition parties by its tool and symbol as well as the slogan of 400 Par.

The opposition Parties seem to be demoralized by the slogan of 400 Par and they are also much confused by the repetition of this slogan off and on by the leaders of the BJP. Thus Amit Shah is driving the BJP's vehicle with utmost care and is making it possible for the BJP to win the 2024 general elections and give a surprise to all and sundry.

Amit Shah is the top organizational icon of the BJP and he will chart the safe passage to the party to give a tough fight to the opposition parties and the INDIA bloc which is already a divided house. Amit Shah is much experienced leader who has got a strong clout in the BJP and he commands much respect in the party and he is the able home minister of the country after Sardar Patel and his image and integrity is unquestionable and impeccable.

Some people say that Amit Shah is the Chanakya of Indian politics some say that he is the Chanakya of the BJP, while some bracket him as the Chanakya of 400 Par, while some say he is the astute leader and the able parliamentarian. Whatever it is, the fact is that Amit Shah is the Chanakya of the slogan of 400 Par and with this catchy slogan he is going to give a hat trick to the BJP.

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

World Earth Day: Plastic Vs Planet

DR. BANARSI LAL

Every year 22nd of April is observed as the World Earth Day across the globe to create awareness on environmental problems and protection of the planet Earth. This day is celebrated by organizing various seminars, webinars, lectures, conventions, campaigns, concerts, tree plantation, debates, essay writing, painting competitions etc. The theme of World Earth Day 2024 is "Plastic Vs Planet". This year theme brings the attention to the serious issue of plastic pollution and how it harms the nature. We need to commit ourselves to end plastics for the sake of human and planetary health. This day is reminder of the importance of environmental conservation and sustainability, encouraging us to come together and take action for a healthier planet for a brighter future. On this day various government and Non-Government Organisations (NGOs), individuals, communities, charities, institutions etc. create awareness on protection of planet Earth. Of all the planets the Earth is considered as the luckiest planet in the universe as it is the only planet where life became possible. It will mainly focus on saving species which are on the verge of extinction due to climate change, pollution, deforestation and illegal poaching. Researchers estimate that our Earth planet is losing about 15 billion trees every year i.e. around 56 acres of forest in every minute.

The idea of celebration of this day firstly came to a senator from Wisconsin, USA; Gaylord Nelson in 1970. He was worried about the rapid increase in industrialization and the careless attitude of human beings towards the environment and the Mother Earth. World Earth Day was earlier proposed to be held on 21st March, 1970, the first day of spring in the Northern Hemisphere but later, United States Senator, Gaylord Nelson proposed to hold it on 22nd April, 1970. It was envisaged to encourage respect for life on Earth, promote the idea of ecology and highlight the control of different kinds of pollution. The first Earth Day was celebrated by more than 20 million Americans and now this important day is celebrated by millions of people across the globe. It seems that we have forgotten the most beautiful gift that we have got in the form of planet Earth.

Many drastic changes have occurred in the human life during the last half century and one of the most instantly observable is the abundance of plastic based products. Plastics continue to help society in innumerable ways but recently they are observed as environmental threats. Plastics are derived through reinforcing fillers, antioxidants with synthetic polymers and colorants. Plastics manufacturing require less energy as compared to metals and glass. Plastics meet large share of the modern society due to their low cost, light weight, high strength, environment stability, ease to carry etc. Plastics have imprints on environment and human health due to their hydrophobic and inert nature. Plastics disadvantages prevent them from becoming universal building block of human civilization. Governments strictly control their use and impose laws governing their manufacture, disposal and recycling.

DR. PARVEEN KUMAR

Earth, the only planet in this universe to host life is now home to about 8 billion human beings. Besides, it also supports trillions of other organisms. It not only provides us with everything we want, but also everything we need to survive. This fifth largest planet in the solar system provides the food we need for life, water we need for hydration, air and the oxygen we need to breathe. Literally everything we need comes from this one planet. We rely upon it for our existence in many different ways. Everything in this planet demands proper conservation and a justifiable development without which a proper balance cannot be achieved. All the components of this planet are equally important and a disturbance to any one of the component have serious and adverse repercussions on the other components ultimately affecting the planet as a whole.

Over the past few decades, human beings and various anthropogenic activities have irrevocably upset the balance existing on this planet and as a result, the world is passing through one of its severe crisis. The crisis if not addressed urgently and properly can lead to a catastrophe. 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. Temperature is on the rise. Sea levels are increasing. Floods and droughts are on the rise. Coastal areas are now unsafe for human settlements. One of the most talked of challenges of present day and that has received national as well as international attention is the plastic pollution and that too of Single Use Plastics (SUPs). If we do not act now, extinction may be humanity's most enduring legacy. To aware the masses about the threats to earth and to work for restoring the health of this planet; World Earth Day is celebrated every year on April 22.

YOUR COLUMN

Good Laugh Is Sunshine

Your Editor, "A good laugh is sunshine in the house", says William Makepeace Thackeray, English Novelist and Illustrator. He is known for satirical works. Good laugh comes when good jokes come out. Laughter is a good response for good joke. A good joke ruminated in the mind quite often evokes laughter even when there is no one to share it. Freedom to laugh will not be available at all the times just because some jokes shared in the past come to mind. It would be obligatory or inevitable to control the laughter when the classes will be going on in schools, while meeting is addressed by someone, when discussions will be going on in the congregations, when present in places of worship, courts, police stations, hospitals etc. Schools and meeting grounds are not totally insulated from the opportunity for laughter. When a good joke is cracked by the teacher, the students laugh from the bottom of heart. The room in which students are housed experiences sunshine. Sunshine in the form of laughter

Social need of plastics is well recognized and it is extremely difficult to select the alternatives of plastics. Plastic is a necessary evil. It is estimated that every year the amount of disposed plastics can four times circle the earth. We can't live without plastics as every day we come across plastic in various forms such as bottles, grocery bags, food containers, computer keyboards, plastic mouse, coffee cup lids etc. It is startling to note that billions of tons of plastics are ending up in the oceans. Plastics take thousands of years to decay. Plastic is an incredibly useful material but it is made up of toxic compounds known to cause illness as it is non-biodegradable. Plastics negatively impact the natural environment and create problems for plants, wildlife and human beings. Plastics received social acceptance in 1600 BC. Ancient Mesoamericans firstly processed natural rubber into rubber bands, boots, coverings etc. Until 19th century man was relying on plastics, rubber and resins. The first plastic was developed by Belgium born American chemist Leo H. Baekeland called Bakelite. Alexander Parkes, a metallurgist from Birmingham developed man made plastic. Throughout his life he made lot of discoveries and secured 66 patents. In 1950 he produced flexible transparent material called as Parestine by blending Camphor and Nitrocellulose. Presently versatility of plastics has led to a great increase in their use. Environmentalists have denounced man made plastic as a long lasting pollutant which does not fully break down. It is very difficult to measure the pollution caused by the plastics.

There are more than 20 different types of plastics which cause pollution. Many parts of the world excessively use the plastics. The per capita consumption of plastics in India is 4%. It has been observed that the disposed plastics based consumer products and infrastructures are the major source of pollution from their manufacture. Plastic waste in big Indian cities averages just 50-100gm/capita/day as compared to 1-2Kg in the Western world. In Delhi the highest plastic waste is piles as 690 tons/day. Generally, plastics are thrown away after the use but because they are durable, they persist in the environment.

Improper disposal of plastic generates litters that drains into the rivers, streams and ultimately pollute the environment. Plastics laced with the chemicals are ingested by the animals that lead to infection and death. Polyolefin constitute the group of non-degradable plastics comprising low density polyethylene, high density polyethylene and polypropylene. They are used for the manufacturing of containers, bags and laminates. Their decomposition evolves carbon monoxide, furans, carbons and dioxins that cause the breathing problems. In order to incorporate certain characteristics several chemicals are added in the plastics. These are Bisphenol A, Phthalates, flame retardants etc. Styrene migrates significantly from polystyrene containers into containers contents when oily foods are heated in such containers. Styrofoam from tea cups, food containers and cutlery leaches styrene, an endocrine disrupter mimicking the female hormone estrogen

and causes cancer, reproductive disorders, asthma and multiple organ damages. Their long time use causes ill effects on the nervous system and red blood cells. Antimony trioxide and Phthalate from Polyethylene terephthalate and Polyvinyl chloride affects the female hormone estrogen and allergies in the children. Cadmium leached from the plastic bags accuses vomiting and heart enlargement. Lead exposure for long time causes degeneration of brain tissues.

Disposal of plastics through land filling evolves noxious additives, colorants and antioxidants are leached off from buried plastic waste that spread into groundwater and impose potential human health hazards. Contamination of plastics in the soil effects agricultural production. Thermal degradation of plastics releases noxious monomers, additives, halogenated hydrocarbons and oxides that adversely affect the human health.

The global plastic production and consumption have increased from the last five decades but their actual role as pollutants is uncertain. It is not certain that what level of exposure is caused by plastic waste and mechanism of their effect on human health is still not clear. Recycling of waste plastics can be done to reduce the hazardous impact on the environment. Recycling of the plastics helps to reduce carbon dioxide emissions. Plastics picking and their recycling is an old business in India. Now this is a well-established urban-survival tactic in mega-cities that supports up to 0.5% of the poor population in many cities and saves the 10-15 per cent of the total waste management costs through the volume of plastic waste. Many small scale industries create job opportunities for many people for collection and recycling of plastic waste. Cottage industries recycling is still considered as unauthorized as the process often is done in closed doors and windows.

The jute or cloth bags can be promoted as the alternatives of plastics bags. It should be noted that in order to make paper bags we need to cut trees which ultimately can affect our lives. Toxic plastic such as polyvinyl chloride can be replaced with relatively less toxic polyethylene or metalloene polyolefin which have little effect on the environment. Bio-degradable plastic bags can be used and advance research is required to develop biodegradable plastics. Bioplastics are biodegradable, non-petroleum in feedstock and supportive for farm sector. On this particular day, let us pledge to do whatever we can to do to protect our environment. We can avoid using our car on this day and save petrol and free the atmosphere from some pollution. We can recycle the papers and stop using plastic bags. We should make collective efforts to protect the environment. Proper legislation and the enhancement of ecological consciousness through education are the best ways to solve the problem of plastic pollution. Let us join our hands together to build a plastic free planet for generations to come. Together we can create a more sustainable world and make a meaningful impact.

(The writer is Sr. Scientist & Head of KVK, Reasi, SKUAST-J).

WORLD EARTH DAY: PLANET vs PLASTICS

sixty years, around eight billion tons of plastic has been produced of which 90.5 percent has not been recycled. This year's theme Planet vs Plastic demand a 60% reduction in the production of all plastics by 2040. In 1950, world produced just two million tons of plastic which has now exceeded over 450 million tons. Half of all plastics ever manufactured have been made in the last 15 years and the production is expected to double by 2050. More than one million plastic water bottles are sold every minute. Plastic contains additives that can extend the life of products, with some estimates ranging to at least 400 years to break down. Further adding to the woes are the Micro-plastics. Micro-plastics are now in almost everything and everywhere. Even in most of the food we eat and water we drink, micro-plastics are present. Micro-plastics are tiny synthetic particles of plastic ranging from microscopic to half an inch that never disappears. A study also reveals that we're ingesting a credit card size worth of plastic every single week as humans and the real health impacts of that, we don't truly know and don't truly understand.

Another high degree threat emerges from the Single Use Plastics (SUPs). SUPs are often misunderstood to be polythene carry bags, but it is not the case. These include grocery bags, food packaging products, bottles, straws, containers, cups and cutlery. What is unfortunate is that about 70 per cent of plastic packaging products are converted into plastic waste in a short span, according to the last estimate done by Central Pollution Control Board (CPCB) in 2015. Almost 66 per cent of plastic waste, comprising poly bags, multilayer pouches used for packing food items, etc (belonging to high-performance poly ethylene/ low-density polyethylene or polypropylene materials), was sourced mainly from households and residential localities. The composition of our waste has also changed drastically in the last decade adding more plastics to the waste that we generate. About 47 per cent of the plastic waste generated globally, came from multi-layered packaging waste. Nearly half came from Asia, according to the UN.

Since 1950, about 9 billion tonnes of plastic has been produced globally and this is equivalent to more than four Mount Everest of waste. Globally, only nine per cent of the plastic is getting recycled, about 12 per cent incinerated and 79 per cent ends up in landfills, according to a report of the

United Nations Environment Programme (UNEP, 2018). Experts also believe that plastic products have an end life and cannot be recycled more than three-four times. In fact, the CPCB has warned that recycled products are at times more harmful to the environment because of added chemicals and colours.

In keeping with the saying, 'better late than never', Prime minister of the country Sh. Narendra Modi has already declared a war on it. Countries have now started taking stringent measures against the use of SUPs. Many countries and states have already imposed bans on plastic. Bangladesh became the first country to ban plastic bags in 2002. In 2008, Rwanda imposed a blanket ban on the sale, use, and production of plastic bags.

**THE WAY FORWARD:** Plastic ban can be effective only if users simply switch to alternatives such as paper, cloth or jute bags. There is also an imminent need for a rethink on the alternate options which are cheap, durable and easily available. This has to be accompanied by targeted campaigns and social networking tools which can make people aware of the concerns and alternatives to plastics. The private sector is also not far behind in tackling this menace. The Coca-Cola has pledged to collect and recycle the equivalent of every bottle or can it sells throughout the world by 2030. PepsiCo has also set a goal of designing all its packaging to be recyclable, compostable or biodegradable, while increasing its use of recycled materials and decreasing its packaging's carbon impact. Unilever has committed itself to making 100% of its plastic packaging recyclable by 2025. Wal-Mart has announced that by 2025, 100% of its packaging for its private-brand products would be recyclable. By 2025, L'Oréal's plastic packaging will all be rechargeable, refillable, recyclable or compostable.

The largest civic observance in the World, World Earth Day thus 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. This day also helps in analyzing the condition of the planet and to discuss a unified response to save the planet. It is a reminder that clean air, flourishing forests, and water are crucial for life on Earth.

(The author writes on agriculture & social issues).

can be seen during night time also. A grief-stricken person cannot laugh. Peace and happiness are the prerequisites for a person to laugh even when jokes are flung. In meetings also, often jokes are cracked and shared. Schools and meetings do not get bored if space is provided for laughter. Class room or meeting hall is filled with sunshine when laughter among the students or attendees in meeting is generated by the teachers or the persons addressing the meeting. More often than not, people have the experience of waiting for an opportunity to laugh in the meeting halls or in the places where serious discussions are going on. One who is unable to control his laughter will be waiting for an opportunity for a joke to come out so that his laughing can be drowned in the sea of laughter with others for some other joke released in the hall of congregation. A good laughter is tonic to the health.

Laughter coming from the bottom of the heart is the product of peace, happiness and response to good jokes. Laughing at others is frowned. Laughing at others triggered by any event that hurts the others is not sunshine. It would be thunderous. (A mythological story suggests that Lord burly Ganapathi after consuming food to his heart's content falls off his vehicle Rat while he will be

going. On seeing this the Moon laughs at him. Lord Ganapathi curses the Moon). Laughing with others is joy some. Spontaneous laughter is uncontrollable. It knows no bounds and breaches the dam of restrictions. There is also the usage of words 'last laugh'. Last laugh is the satisfaction of ultimate triumph or success especially after being scorned or regarded as a failure. When someone is discarded by a friend or group of friends and relative or group of relatives, if that discarded person is honoured by other group of friends or relatives, he would have a last laugh. One will make himself a laughing stock when he tries something seemingly stupid or silly but ultimately does not succeed much to his own chagrin and much to the expectation of all. If someone does not succeed in something much to the delightfulness of his enemies or rivals, it is in Kannada described as "laughing at the person who stumbles while walking". Laughter greeted with laughter sparks sunshine. The timing and context of laughing only determines whether a laughing is sunshine or not. Laughing is used as a tool to pooh-phoo at something also. Laughing can make or mar the situations. Care should be taken to make laughing always a sunshine.

K.V. Seetharamaiah