ble societies, trusts, institutions etc. All these

## ENTRANCE EXAM SCAM

orruption in entrance exams is a pervasive issue that undermines the integrity of educational systems worldwide. These exams, which determine admissions into universities, colleges, or specialized programs, are meant to be meritocratic, ensuring that candidates are selected based on their knowledge, skills. and potential. However, corruption in these exams can take various forms, ranging from cheating and bribery to manipulation of results and unfair practices. This phenomenon not only compromises the credibility of educational institutions but also impacts the aspirations and futures of countless students.

One of the most prevalent forms of corruption in entrance exams is cheating. This can involve organized efforts where candidates obtain leaked exam papers or engage in impersonation during the exam. Such activities are facilitated by a network of individuals who profit from selling exam papers or providing fraudulent services to candidates. The widespread availability of technology has also made it easier for cheaters to use devices such as hidden earpieces or smartphones to access external information during exams. bypassing exam regulations and controls.

Bribery is another significant aspect of corruption in entrance exams. Candidates or their families may offer money or gifts to exam officials, invigilators, or even teachers for access to favorable exam centers, lenient supervision, or inflated scores. Similarly, officials responsible for overseeing the exams may collude with external parties to manipulate results or alter scores in exchange for financial gain. This form of corruption not only compromises the fairness of the exam process but also erodes public trust in educa-

The consequences of corruption in entrance exams are far-reaching and detrimental. It undermines the credibility of academic qualifications obtained through corrupt means, devaluing the efforts of honest students who study diligently. Legal frameworks and enforcement agencies play a crucial role in combating corruption by prosecuting offenders and imposing strict penalties for those involved in cheating, bribery, or manipulation of exams.

# What household items enhance fitness and health

hese days, it seems like everyone wants to be fit and healthy. We're all constantly busy with work, always on the go to make ends meet and provide for our families. But in the hustle and bustle of our daily routines, we often fall prey to various health issues like sickness, stress, high blood pressure, and diabetes. This is mainly due to our lack of physical activities and exercise. We rarely find the time to prioritize our well-being Even if we manage to find a few minutes in the morning and evening, there's no need to join gyms or clubs to maintain our fitness and health. We can make use of everyday household items.

Then comes the question of not having the financial means to purchase weights. What are some household items that can support my fitness and well-being?

Discover the versatility of everyday objects as exercise equipment. Here are a few examples: water bottles, canned goods, bags of rice or beans, and even books. Ensure that the items are firmly held and have a suitable weight for your workout. It's important to exercise caution when incorporating household items into your workout routine to prevent any potential injuries.

The wall: Every home must have a minimum of four walls! Walls offer a sense of stability during stretching exercises or when engaging your quads and glutes with wall sits.

Stairs: If you have a set of stairs in your home, you have a wide range of exercises at your disposal! Using stairs for exercise is an excellent way to get your heart rate up and engage in a challenging workout. Ascending or descending the stairs is an excellent method to invigorate your cardiovascular system and engage vour gluteal muscles-without incurring any expenses. Try alternating between running up and down the stairs for 30 seconds, followed by a 30-second rest. Perform this exercise multiple times to incorporate interval training into your routine. Another way to incorporate a calf exercise into your routine is by standing on the edge of a stair, holding onto the railing, and allowing your heels to hang over. Here is where you begin. Start by standing on the balls of your feet and then return to your original posi-

Couches and chairs: Just like push-ups, sit-ups, and squats, utilizing your own body weight as a form of exercise equipment is an incredibly efficient way to achieve a muscular workout. Utilizing your living room couch or dining chairs as a workout bench can help you enhance your workout routine. You can incorporate challenging triceps dips, abs workouts, and even shoulder drills to add intensity to your exercises.

Children Swinging: Young ones Swinging your child around is a wonderful way to strengthen the bond between us and our beloved little ones. However, it's also quite a challenging workout. One creative way to incorporate exercise into your routine is by involving your children. You can try using them as weights for bench press, having them lay on your back during push-ups, or even incorporating them into squats and kettlebell swings for

A countertop: The countertop Improve the strength of your arms and chest with the help of countertop push-ups. Practice several sets to see the desired results. These activities are perfect for filling in those moments when you're waiting for water to boil or the oven to pre-heat.

Broom Besides sweeping: Broom In addition to its cleaning capabilities, a broom can also provide a workout for your core, hips, and glutes. Next time you're sweeping the floor, why not add some fun and dynamic movements to your usual routine? Try incorporating hip hinges or oblique twists to make it more interesting! Shovel: A shovel can be utilized in various ways to enhance your at-home workouts, with the most apparent being the act of digging holes or transferring soil or gravel from one location to another. Nevertheless, it proves to be valuable in unilateral training and strengthening the core. Elevate the shovel above your head with one arm during core workouts or squats to intensify your exercise and provide additional challenge.

Towels: Towels are incredibly versatile and user-friendly, making them an excellent choice for incorporating into your exercise routine. They offer a wide range of possibilities for various workouts and can be easily adapted to suit your needs. They provide a viable option to resistance bands and increase the challenge of your at-home push-ups and planks. Additionally, they can serve as an improvised core disk glider to enhance your core strength-

Jerry cans: Containers for liquids, such as jerry cans, water bottles, and detergent cans They can be used as makeshift dumbbells and kettlebells for arm workouts, and can also be incorporated with a pole or sturdy stick to simulate a barbell for exercises like squats and bench press.

Tote bags: Tote bags Another option is to use a sturdy tote bag to hold heavier items like books or cans of food, creating a makeshift substitute for exercise equipment. It may feel uncomfortable initially, but you'll soon realize how challenging it can be to navigate. Indeed, it functions similarly to a resistance band, necessitating a slower, more focused movement of your muscles. Here's another fantastic choice for curls, deadlifts, and dumbbell

In general, there are numerous everyday objects that can serve as makeshift weights for your workout routine. Embrace your creativity and prioritize the use of durable items that won't pose any risks of breakage or injury.

(The writer is a veteran journalist and freelance writer based in Brampton)

#### ■ DR. BANARSI LAL

he Indian economy in the past, presently and in future will remain predominantly depend on rural development because very high proportion of the Indian population lives in rural areas. In agrarian country like India rural development is must for national development. In order to improve the quality of life of rural people, rural development is essential. It requires a sustainable increase in the access of each and every individual to the basic necessities of life. Also every individual selfrespect is must. Development is the cherished goal of every individual, family, community and nation. Hence, it is the prime responsibility of every nation to initiate and sustain the process of development. In 1901, 89 per cent of the Indian total population was residing in the rural areas while still around 70 per cent population live in the rural areas. It is expected that by the turn of 21st century at least 50 per cent of population would be living in the rural areas. About two-third of the workforce is engaged in agriculture. Agriculture contributes about 17 per cent of India's gross domestic product. Development is influenced by the multiple factors such as natural resources. innovative technologies, human resources, different developmental programmes and schemes, policies etc. Different institutions and organizations play the significant role for rural development. They help in the rural development by way of provision of inputs, services, by influencing investments and savings etc. There is positive correlation between different organizations and level of rural development. In fact, all developed nations are well organised and all developing countries are either not fully organised or poorly organised. Lack of appropriate organizations is one of the most serious hurdles on the pace and development of rural areas. There is dire

**Towards Rural Prosperity** need to redesign and launch appropriate organisations for the rural development.

Presently India has achieved self-sufficiency in the food grain production and milk production-the two important ingredients for the vegetarian diet. These two things have been achieved due to green revolution launched in the late sixties and white revolution launched in the early seventies. In 1950-51 the food grain production in the country was only 51 million tonnes which has increased to 329 million tonnes in 2023-24. Now India has emerged as the leading milk producer in the world leaving behind the United States of America. Now per capita availability of good grains in our country is 485.17 gm per day. Currently the milk production in our country has increased to 176 million tonnes. The per capita availability of milk in India has increased to 375gms/day. Per hectare yield rates of the major crops have also reasonably increased. Rapid urbanisation, change in food habits from consumption of food grains to milk and milk products, fruits and vegetables are new challenges to the Indian agriculture. Although India has made an impressive progress in the food grain production and milk production, the achievements in the poverty eradication and improving the life expectancy have been dismal. Still the percentage of people below the poverty line is still high, life expectancy, per capita income and Human Development Index is still low. It has been observed that development in India is both encouraging and discouraging and there is need to enhance both. So, it is necessary to identify the determinants of development and implement them to achieve the desired level devel-

There are many organizations in India which are actively working in agriculture and rural development. They include public, companies, co-operatives, partnerships, charita-

organisations work together to cater the needs of the rural people. Rural development should be considered as the joint venture of public, private, co-operative, corporate .A systematic and balance approach is needed for the development of rural India. Although government makes efforts for the development of the rural development but government alone cannot solve all the rural problems. Co-operatives, voluntary organisations, corporations and private sectors all can play their role for the rural development by complementing the activities of the government. The role of government should be to define the role of other agencies, coordinate and regulate their activities and provide certain facilities and services which are not provided by the other agencies. It is necessary that rural people should be organised within an institutional structure that gives them access to the national, political, economic and social system. In India, co-operatives are the most commonly found form of people's organisations.Co-operation has been emphasized across the globe. Co-operation is manifest in countless social activities performed by the man for attaining the common goal. A cooperative is generally observed as socio-economic organisation that can fulfil both social and economic objectives of its members. A co-operative has certain values and principles of its own which distinguish it from other organisations. Economic, social and moral are three dimensions of co-operatives. The motto of co-operation, "Each for all and all for each", signifies loyalty, trust and faith. A co-operative is democratic institution of the members, for the members and by the members. Co-operatives have more advantage as compared to the other forms of organisations in involving the people, in mobilising the resources and achieving the desired goals. All these advantages help co-operatives in

improving their competitive position. Even Gandhiji considered co-operation as a great instrument for the rural development. He suggested the specific roles of co-operatives in the agricultural sector and promoted the co-operative farming and thereby suggested for further fragmentation of land holdings. He suggested the weavers and spinners cooperatives, credit co-operatives and dairy cooperatives. Pt. Jawahar Lal Nehru, the first Prime Minister of India had a strong favour of co-operatives. Sardar Vallabhai Patel, the first Deputy Prime Minister and Home Minister of India, had a great faith in cooperation as a means of promoting farmers well-being. He guided and assisted for the Kheda District Co-operative Milk Producers Union Limited popularly known as Amul. Co-operatives occupy an important position in India's rural economy. India has the largest network of co-operatives in the world. Co-operatives now cover around all the Indian villages and 67 per cent of rural population, nearly 49 per cent of the rural credit, 60 per cent of total sugar produced and 35 per cent of total fertilizers distributed in the country. The Indian Farmers Fertilizers Cooperative(IFFCO) and the Krishak Bharati Co-operative (KRIBHCO) are the two cooperative fertilizers plants which manufacture about 21 per cent of the total fertilizers produced in the country. The Anand dairy cooperatives are considered to be the most successful in serving their members and society on large scale. Co-operatives that are owned and controlled by their members and properly managed can ensure the good quality products at a reasonable price to the consumer. Thus, they help to improve the welfare of both the producers and consumers as has been demonstrated by Anand - pattern dairy co-operatives. (The writer is Chief Scientist &Head,

KVK, Reasi SKUAST-J).

# **Good & Bad Effects of Inflation on consumers** Households observing financial discipline will automatically help themselves to combat any financial stress triggered by inflation or deflation

### SAJJAD BAZAZ

rise in the general price level of goods and services, precisely inflation, has remained a Constant subject of concern as it affects everything from the cost of groceries and housing to the economy's overall health. On one hand, the Reserve Bank of India has remained (and continues to remain) too focused to control the inflation within the given acceptable limits. On the other hand, the consumers are continuously struggling to negotiate the pressure of inflation on their overall financial health.

According to the National Statistics Office (NSO) data, India's retail inflation rate dropped to 5.09 percent in February 2024, the lowest in four months. The retail inflation rate registered a slight drop of 0.01 percent in one month, standing at 5.10 percent in January 2024. The current retail inflation eases to 4.83 percent in April 2024 and remains in the Reserve Bank of India (RBI) tolerance band, set at 2 to 6 percent.

The data further reveals that the rural areas' inflation rate, at 5.34 percent, remains 0.56 percent higher than the urban areas (4.78 percent), which stood at 4.34 percent in December. Food inflation in February stood at 8.66 percent, a rise from 8.3 percent the previous month.

Notably the RBI shoulders the respon tame inflation. It tweaks interest rates. The modus operandi is that by increasing lending rates, the apex bank aims to make loans costlier. Once the loans become costlier, the borrowing is discouraged. This leads to a cut in spending by the consumers. A cut in spending translates into less money in the market and prices stop rising. Ultimately, inflation moderates.

For the general public, inflation has always

remained a crucial measuring rod to determine their purchasing power. It is the inflation that pushes the prices of goods and services up and consumers' wallets are hit as they get less for more. They are forced to change their spending habits. For instance, a common household had budgeted Rs.5000 on grocery items per month. They were comfortable with the budget as out of the budgeted amount to be spent on grocery items, they used to save Rs.1000 per month. To be precise, they used to get desired grocery items at Rs.4000 out of the budgeted amount of Rs.5000 till last month. But this month there was a price rise in certain grocery items in the same list and that led them to shelve out extra bucks by let's say Rs.500 more. The items they used to get at Rs.4000, were now available at Rs.4500. So, the price rise reduced their savings by Rs.500. If the price rise continues further, they may be forced to spend a full budgeted amount of Rs.5000 earmarked for grocery items and will be left with no savings. In fact, the uncontrolled price rise has remained a permanent feature and there is a possibility of getting the same list of items at the price more than the budgeted amount. In this situation, the household may be either forced to remove an item from their cart or buy the product that has the inflated price by paying extra to affect their domestic budget.

So, factors causing price rise of essential and non-essential goods and services and creating uncertainty in consumption actually leads to inflation. Experts are always of the opinion that inflation should be moderate enough to drive consumption and create a baseline for economic growth. Inflation that is out of range (precisely high inflation) is a termite on the economy and the scenario clearly indicates that all is not well with the economy.

Then there is another serious factor of inflation which equally makes worrying - the low inflation. This kind of inflation, when in the negative zone, is referred to as deflation.

In a situation like this, prices fall over time. It is because either demand falls a lot or there is more production of goods and services than required. This leads to fall in sales and companies are forced to sell their products at discounted rates to lure customers in buying spree. Precisely, contrary to the high inflation scenario, prices fall when there is deflation. The situation aggravates when consumers stop shopping for more and more products despite low prices as they look for further discounts in coming times. This means, the demand continues to fall, leading to further

Deflation is not at all good for the financial health of businesses as low demand of their products and services affects their profitability. All this leads to a slowdown in the economy. In simpler terms, the deflationary situation is not good for the overall economic health of the country as it leads to economic growth in a depressed mode.

A Wall Street Journal report is worth quoting. It states that deflation has hit countries Europe and Japan. Even in Asia, seven out of 10 countries excluding Japan are facing deflation. India has now joined this list after reporting a fall in prices for the fifth time in decades. However, experts see no reasons to worry about deflation in India as the demand scenario in India remains intact and is not affected. "The key reason for deflation is the fall in global commodity prices. After years of high inflation, the fall in prices

could very well help improve demand for goods and services in India. This will help accelerate economic growth further, not slow it down, argues an acquaintance who is an economic

Meanwhile, the path of inflation is hugely dependent on the prices of domestic commodities like vegetables, cereals, spices, etc. Earlier, the RBI had blamed effects of the pandemic, the geopolitical conflict, and the weakness in the Indian rupee manifesting in the demand-supply mismatch of goods and services, leading to downside risks to growth.

So, how to remain insulated against inflation? The most important thing for common consumers is to remain financially disciplined not just about spending but about their savings and investments too. They should not allow their spending habits to eat up their savings. In fact, they should live on a budget that guides them in the event of inflation as well as during the deflation situation. When it comes to savings and investments, they should choose the right investment products, which not only suits their personal finance needs, but also allows their savings to grow enough to beat inflation as well as deflation.

The bottom line is that managing personal finances is one of the best ways to beat inflation Once households consistently live a life on a budget tailored according to their source of income and putting their income in line with the resources, it's guaranteed to result in their wealth creation over time. Not only this, the households with this strategy of financial discipline will automatically help themselves to combat any financial turmoil triggered by inflation or deflation.

(The author is a veteran journalist/columnist)

# **Forests Mitigate Air Pollution**

## **G L KHAJURIA**

orest is biological community having complex social organisation of living communities at work. Trees play a crucial and prominent part in conserving soil, water and moisture. These take up water from soil through a process of ascent of Sap and release it into the air or atmosphere through transpiration and this process continues as a result of condensa-

The cycle of water absorption from the soil and condensation causes rainfall and this process also continues. At ecosystem level under such conditions these function as important sinks of air pollution. When exposed to intermediate dose, the individual tree species may be subtly and are affected by nutrient stress. impaired metabolism, predisposition to entomological or pathological stress as direct disease

Exposure to high dosage may, however, induce acute morbidity or mortality of a specific tree species. For the survival of any living organism, clear air is vital. The earth's atmosphere is a mixture of gases, water vapours and a variety of solid particles and the liquid particles. Pollution of air has been defined as the presence of solid, liquid and gases substances in the atmosphere in such concentrations as may be injurious to humans, plant and animal life or property.

In some of the cases, the composition of air is not confined to only to the cities. Volcanic eruptions, forest fires and dust stirred up by the storms, winds, pollen hair and other suspended particles and other living particles such as bacteria and viruses can do contaminate atmos-

Nearly 300 million tonnes of air pollutants are emitted onto the air which is much more than that can absorb into natural system safely. Air pollution from huma activity commenced when the human learnt to use fire.

But large scale of air pollution is relatively of recent development, mainly due to accelerated industrial activity. Further, the contaminants by the nature of activities that produce them are likely to be omitted into the air in thickly populated region. Therefore, the effect even if small or on global scale may be locally severe. The estimate level that increase of 6oC in the global mean temperature due to addition of enormous quality of carbon-di-oxide in to the atmosphere is likely to create climate condition that earth has never experienced for the last 70 million years. Even if the actual increase in the temperature is smaller than anticipated, it would be enough to meet large volume of polar ice and raise the sea level.

5 Meter. Similarly, the ozone in the stratosphere effectively blocks much of the harmful solar ultraviolet radiations that would otherwise reach to earth's surface. The present calculation indicate around 18% of ozone layer will be adversely effected by the man-made chemicals.

Half the ozone layer destruction nearly 8% will occur in the next 35-40 years. Both industries and urban communities pollute and contaminate the air with substances that are dangerous to human and other living organisms in the environment. Such pollutants include radioactive dust, salt spray, herbicides, aerosols, combustion of coals, manufacture of bricks, ceramics, cement, glass, phosphate fertilisers, liquids droplets o acid matter, gasses and solid particles.

These substances can act alone to irritate all forms of life, or more dangerously, they join together to act adversely upon the environment. Nuclear Power Station of U.S.A. etc are warning signals both for the developed and develop-

ing countries. Air pollution may be removed from the atmosphere by a variety of mechanism. The primary natural process of cleansing the environment are precipitation, chemical reaction, dry deposi-

tion or sedimentation and absorption. However, the plant communities such as forests and other plantations play prominent part in mitigation environmental pollution. Plants or forests are efficient enough to sink for many gaseous pollutants. The interception and retention of atmospheric particles by plant is highly variable and primarily dependent on size shape, wetness and surface texture of the particles and as well as intercepting plant parts with micro and ultramicro climatic condition of the surrounding. Smaller leaves are generally more efficient particle collectors than large leaves. Particle deposition is heaviest at the leaf tip and long leaf margins. Leave with complex shapes and large circumstances are ratios collect particles more sufficiently.

The tree may be specially efficient filter of carbon particles because of large size, high surface to volume ratio of foliage, petioles, twigs and frequently hairy or rough leaf, twigs and bark surfaces, Because the interior portions of forest stands act still the air, mean wind speeds are reduced and particle deposition will be augment-

When vegetation surfaces are wet or damp the pollutants removal rate may increase upto ten folds. Under damp conditions, the entire plant surface i.e. leaves, twigs, branches, stems are available for absorption. Light also plays a critical part in determining physiological activities of leaves and stomatal openings and as such exert great influence on foliar removal of pollu-

Under conditions of adequate soil moisture, pollutants absorption of gaseous pollutants absorption by vegetation is constant throughout the day as the stomata are fully open. Moisture stress sufficient to limit stomatal opening and relatively common in urban environments would severely restrict absorption of gaseous pollutants diffusivity rates are greatest. Sulphur and

nitrogen oxide are taken in respiring leaves in the dark, but uptake rates are greatly reduced

as compared to the rates in the light. Under certain environmental circumstances. especially where tree surfaces are wet and the leaves are metabolically active, biologically and medically significant reduction in ambient levels of Sulphur dioxide, Nitrogen dioxide ozone and hydrogen fluoride may be realised by stands of trees for extended periods as long as the atmospheric loading of the containment go is not

excessive. Apart from forest fires, which is one of the most sources of air pollution during the course of metabolism, a variety of woody plants release certain carbon, Sulphur, nitrogen oxide particulates and volatile hydrocarbon. From the point of view of human health, a huge quality of pollens are released during the reproductive phase by the forest trees which would be allergic some

High air pollution may result in severe perturbation in the ecosystem structure and function these situations involve the impact of gaseous pollutants such as release from industrial sources, on surrounding forests. In extreme situations, irrespective of specific pollutants, forest communities react first by loosing sensitive species, second by losing the tree stratum and third by maintaining cover of resistance shrubs and herbs wildly recognised as aerial succession species in less extreme situations, the losses of sensitive species followed by maintenance of tree stratum.

Field systems of air pollution are not highly specific mimicked by a wide variety of other tree stress factors and can be recognised only by edaphic, entomological, pathological and stress factors characteristic of a given flora in a given

(The author is former Deputy Conservator J&K Forest).