

BALANCE THE NATURE

Forests have special importance not only in our country but also in the whole world. Forests are the storehouse of great beauty of nature. The form of nature that forests provide inspires humans. The second thing is that forests are the basis of humans, animals, birds, creatures etc. Everyone's health is protected only through forests.

Forest is thus a major necessity of our life. If there are no forests then we will not exist and if there are forests then we will live. What I mean to say is that we have an integral relationship with the forest, which is continuous and the biggest. In this way, since our need for forests is paramount, we also need to protect it above all else.

There has been a need for tree plantation in our country since ancient times. The trees in the ashrams of great sages and sages have been prepared through forest plantation only - the great poet Kalidas has mentioned the plantation of trees by the disciples of Maharishi Kanva under 'Abhigyan-Shakuntalam'. There is a need for tree plantation so that the trees remain safe. Their places should not be vacant, because if there are no trees or forests, our life will start becoming void. There will come a time when we will not be able to live. The reason for destruction of life will be that due to lack of forests the balance of nature will get disturbed. When the balance of nature gets disturbed, then the entire environment will become so polluted and impure that we will neither be able to breathe properly nor will we be able to consume food and water properly.

Changing the destiny of Jammu and Kashmir

■ OMKAR DATTATRAY

Ever since the parliament of the country and the centre government of Modi changed and annulled the controversial article 370 and did the re-organization of the Jammu and Kashmir and bifurcated the erstwhile state into two union territories of Jammu ,Kashmir ,there has been a sea change in the fate of the UT and its people .In fact the central government and the LG administration took a number of measures to ensure the social and economic development of the UT with the result there has been a change in the destiny of Jammu and Kashmir and this is an extra-ordinary development and aimed at the changing destiny of the UT and its people .The centre government and the UT administration has and is speeding up the tempo of socio-economic development and landscape of the Jammu and Kashmir. There has been a total change in the economic as well as social profile of the UT and the people are the greatest beneficiary of the schemes and flagship programmes of the centre and these positive changes have resulted in changing the fate and destiny of the Jammu and Kashmir .The initiatives ,schemes and programmes of the centre government and the UT government brought about desired results as it transformed ,reformed and modified the socio-economic canvas of the UT and the citizens are greatly benefitted because of the active cooperation and co-ordination of the centre and UT government and all this resulted in the transparent and quick delivery of the schemes and also the speedy disposal of public grievances and issues as well as concerns .Because of the speedy implementation of the central flagship schemes and programmes ,there ushered a total revolution in the socio-economic profile of the UT and the beneficiaries of the centre and UT schemes has directly benefitted the people and all this has resulted in wholesale and total change which in fact led to change in the destiny of Jammu and Kashmir The other day LG Monaj Shina said that the UT government is determined to change the destiny of Jammu and Kashmir .He said the rapid development and performance of various sectors show the limitless potential of the union territory and we are determined to transform this vast potential into reality to change the destiny of Jammu and Kashmir in Amrit Kaal .It is speedier execution and implementation of programmes which has led to tremendous boost to the economy of J&K and it also plays an important role in maintaining standards of transparency and accountability for effective and efficient public delivery system .The central government and the LG administration is focusing on the socio-economic development of the UT and is trying most for ushering total development resulting into change in the destiny and fate of the people of Jammu and Kashmir .Both the governments are working round the clock for the speedy ,transparent ,honest and quick development of the UT and it gives rise to the efficient public delivery system and all this has resulted into change in the destiny of Jammu and Kashmir and its people who are the real masters of democracy in India .There have been major changes to Jammu and Kashmir as it became a union territory .There will be a trimmed council of ministers ,increased number of assembly segments and an abolished house of elders .The strength of the assembly in the union territory will go up by seven seats ,while the council of ministers will be trimmed to 10% of the total strength of the legislature. These are the major legal and constitutional changes that have been effected in the UT after the centre read down article 370 and divided the state into two UT's -J&K and Ladakh .There has been discrimination with Jammu division and now with the implementation of the report of the delimitation of the assembly constituencies ,the political discrimination with Jammu will cease .Jammu will likely walk away with the loins share of the new assembly seats .The delimitation of the assemblies was one of the long pending demands of the BJP to end discrimination against Jammu .The assembly term will now be for six years instead of present five years term .The legislative assembly may by law adopt any one or more of the languages in use in the union territory of Jammu and Kashmir or Hindi as the official language or languages to be used for all or any of the official purposes of the UT of Jammu and Kashmir is read in the J&K re-organization act .With the reorganization of the state ,the J&K Legislative Council ,also known as the house of elders has been abolished .Besides this many changes of far -reaching consequences has taken place in Jammu and Kashmir which has a positive impact upon the development of the UT as it has altered the socio-economic profile of the UT .Thus it can be said that there have been sweeping changes in the social ,economic and technological spheres and all this has resulted in changing the destiny of Jammu and Kashmir .Post-abrogation of article 370 and the re-organization of the state in August 2019,there have been sea change in the social ,economic ,technological and political canvas of the erstwhile state of Jammu and Kashmir and the sum total of the changes is resulting in changing the destiny of Jammu and Kashmir .The initiatives ,innovations and prigrammes of the central government and the UT administration has led to the change in the fate and destiny of the Jammu and Kashmir. There has been spectacular development in the tourist economy of the country and the economic and social development and change has led to change in the destiny of Jammu and Kashmir.

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

When there are thoughts, it is distraction:
when there are no thoughts, it is meditation.

-Ramana Maharshi

Human Microbiota and Probiotics

■ DR NEENA SHARMA

Hippocrates quotes "let food be thy medicine and medicine be thy food", which we must understand in the world of rising diseases in our society. As Antony van Leeuwenhoek was first person to report the existence of microorganisms and their association with humans at the end of the 17th century. Later, Elie Metchnikoff believed that lactic acid producing bacteria in sour milk and yogurt could mitigate infectious process and can be harnessed to treat variety of diseases. After these discoveries, in early 1900s it was found that the "microbiota" is the collection of all microbes such as bacteria, fungi, and viruses that naturally live in human body. The major sites of human microbiota composition are oral cavity, respiratory tract, skin, gut, and vagina.

Many of the microbiome live in symbiotic relationship with human body benefitting from each other. Disturbance with these microbiome called dysbiosis, results in variety of chronic diseases such as inflammatory bowel disease, cancers, hypertension, obesity, diabetes, anxiety and depression. In this article, we have explained the functions of microbiome in human health and diseases. Additionally, we have highlighted the health benefits of prebiotics and probiotics.

"Healthy" gut microbiota

The human gastrointestinal (GI) tract contains huge microbial community which is about ~100 trillion microorganisms. The gut microbiota has a multidirectional connection with other organs which play a pivotal role in neuroendocrine, immunological and metabolic pathways. The important gut flora includes Bifidobacterium, Lactobacillus and Saccharomyces boulardii. In a healthy gut, the microbiota provides stability, resilience, and symbiotic interaction with the host.

Probiotics

Probiotics are defined as live non-microorganisms which when administered in adequate amount confers health benefit in the host. Probiotics are beneficial for digestive health because of their role to maintain gut microbiome, mental health and immune function. Currently strains of Lactobacilli and Bifidobacteria are available for human use to reduce the risk of gastrointestinal (GI) infections.

Benefits of Probiotics

1. Improved digestive health - Aids in digestion, reduces gastrointestinal discomfort and constipation, functional abdominal pain, infant colic, antibiotic associated diarrhea and maintain remission in Inflammatory bowel disease such as Crohn's disease.

2. Infectious diarrhoea - used in treatment of diarrhea caused by Rotavirus, C. difficile and Traveller's diarrhoea.

3. Helicobacter pylori infection and Peptic ulcer - Probiotic bacteria are antagonistic to H. pylori. Lactobacillus salivarius has been shown to inhibit the attachment of H. pylori in vitro.

4. Mental health - Research have demonstrated the benefit of Probiotics for mental health, due to two-way communication between gut and brain known as Gut - Brain axis. The healthy gut causes improved mental health and wellness therefore gut is also called "second brain" as it produces neurotransmitters namely serotonin and dopamine reducing the symptoms of depression.

5. Allergy - A randomized controlled study reported resolution of eczema in breast fed infants because of increased production of anti-inflammatory mediators.

6. Strengthens Immune system - Probiotics enhance immune response against the pathogens by increasing various chemical mediators of inflammation.

7. General health - Probiotics decrease the need for the antibiotics and cause overall improved Health and wellness.

Prebiotics

Prebiotics are non-digestible carbohydrates mainly fibres which our body can't process and promote the growth of Probiotics. Commonly known prebiotics are oligofructose, inulin, lactulose and breast milk oligosaccharides. These compounds nourish the gut microbiome, are essential for bacterial survival and are neither digested nor assimilated by the body but are fermented by the colonic bacteria to produce short chain fatty acids (SCFA). SCFA play a role in electrolyte absorption in colon, shorten gastrointestinal transit time, stimulate growth of Bifidobacteria, protect against colorectal cancer, and infectious colitis. The extent of physiological effects varies due to factors including baseline gut microbiome and diet.

Benefits of Prebiotics

Improves digestive health by softening stools and reducing

constipation, boosts the immune system by increasing production of white blood cells, reduces the risk of digestive diseases like inflammatory bowel disease, colorectal cancer and helps in calcium absorption.

Sources of Probiotics

Natural	Synthetic
► Yoghurt, buttermilk, cottage cheese, soy products	► Available in form of capsules, sachets and liquids containing bacteria in freeze-dried form such as PRO-B sachet
► Pickles, fermented sauce and foods	► Probiotic cultures are available for fermented dairy and food products.
► Tomatoes, fermented vegetables, bananas, watermelon, grapefruit etc.	

Synthetic Probiotic products may contain single strain or mixture of two or more strains of bacteria. Description of synthetic probiotic should include strain designation, viable count of strain at the end of shelf-life, storage conditions, recommended dose and physiological effects. Synbiotics combine both probiotics and prebiotics sold as food or supplements and combinations are Lactobacillus and Lactitol, Bifidobacteria and Fructooligosaccharides.

Sources of Prebiotics

Natural	Synthetic
► High fibre foods like whole grains, whole oats, barley, flaxseeds, almonds	► Lactulose
► Legumes like soybeans, peas, chickpeas, peanuts, lentils etc	► Lactitol
► Apples, raw banana, pear, onion, garlic, broccoli, cucumbers, cauliflower etc.	► Oligosaccharide (food additives)
► Breastmilk (contains oligosaccharides)	

Take Home Message

One should include fermented and high-fibre foods in the diet for overall health and well-being. In case of digestive problems, synthetic synbiotic combination of Probiotics and Prebiotics are advisable after medical consultation.

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Mobilizing and Empowering the Rural Youths for Sustainable Development

■ DR. BANARSI LAL

Migration of rural youths in urban areas in search of employment has risen fastly. This has resulted a decline in workforce in the agricultural sector. The globalisation process has brought certain changes whose implications for the rural society and the rural youths need to be thoroughly understood. The onset of market economy has witnessed a massive growth in industrial activity which requires large workforce. The advent of free market has been able to generate employment opportunities in the private sector which requires highly skilled workers. A majority of rural youth may not meet the criteria of private sector for a variety of reasons, like lack of advance technical expertise, inadequate trainings etc. According to the UN youth is defined as a person in 15-24 years of age group whereas the census of India treats people in the age group of 15-29 years as youths. According to Baizerman (1991), in the third world countries youth have not been able to play a vital role in the developmental process and has remained a marginalized group. The participation of the rural Indian youth can be more impressive if more attention is paid on them. Mass media does not pay more attention on rural youths. Due to their proximity to institutions like universities, colleges, institutions of mass communication, political centres and by virtue of being an integral part of modernisation process like developing a rational outlook, adopting different sub-cultures and promoting cosmopolitanism, the urban youth continuously remains in the limelight. Rural areas are slow in their socio-economic development, slow pace of modernisation, industrialization, overpowering presence of powerful but retrogressive social institutions, inequitable distribution of land and most

significantly and underutilisation of human resources. The stereotype of rural youth is gullible, conservative and he himself tries to fastly change but cannot escape from the adverse impact of the aforementioned problems.

The globalisation process has brought certain changes whose implications for the rural society and the rural youths need to be thoroughly understood. The onset of market economy has witnessed a massive growth in industrial activity which requires large workforce. Migration of rural youths in urban areas in search of employment has risen fastly. This has resulted a decline in workforce in the agricultural sector. The advent of free market has been able to generate employment opportunities in the private sector which requires highly skilled workers. A majority of rural youth may not meet the criteria of private sector for a variety of reasons, like lack of advance technical expertise, inadequate trainings etc.

Present era is an era of information. Communication network has combined the world into a cyber-frame. The transaction in all the sectors is now being carried through computers. The rural youths in this field are left behind their urban brethren. The urban youths have access to computer education while the exposure of youth to computers in rural areas is still limited. The 1990s witness a rapid expansion of television networks. The cable and satellite television made a mark in India and television emerged as the most effective medium of entertainment. It plays a key role in dissemination of information and entertainment. In some of the rural areas still the rural youths miss the opportunity to view the informative programmes. Even in some of the downtrodden rural areas still the youths do not get information through print media. The latest

information should be reached to the rural youths of these remote areas. There has been a sustained campaign by the market forces to increase their rural marketing operations as three-fourths of the consumers live in rural areas and more than half of the national income is generated in rural areas. It has been observed that mostly television is the forte of the market forces and continuously promote consumerism which stimulates unrealistic desires in the rural youths. The political processes at the village level are intertwined with the operational aspects of the existing social hierarchy. It has been observed that rural youths are encouraged during elections campaign but the number of elected representatives from this segment is very low. Thus, despite their sincere efforts in the democratic processes they have a long way to go in holding positions and decentralisation of political power has not resulted in major changes in the social structure of villages. It has been observed that increasing population, overexploitation of biological resources, construction activities and changing consumption has led to the loss of biodiversity. For all this rural population cannot be held responsible for excessive consumption as it is the youth of urban areas whose consumption levels reached new heights leading to enormous pressure on the natural resources. The industries release untreated effluents contaminating the water reserves which will expose the nearby rural population to waterborne diseases. The toxic wastes of the industries are dumped in the waste lands on the outskirts of the urban areas or nearby villages which poses a serious impediment to the wasteland development projects. Watershed development is a major agricultural activity. It is the youth of village who take the responsibility in the success of watershed projects like construction

of check dams and water tanks. The educated rural youths can prevail on the rest of population to take steps to preserve ground water resources. Joint forest management is another dimension of environmental protection. The youth in the villages can be mobilised to take care of illegal felling of trees and make social forestry programme successful.

In rural areas gender discrimination is very high. Less literacy rate and traditional thinking of the people are the major reasons for the inferior status to the rural women. It has been observed that a large number of women representatives are chosen. Despite their success the rightful ascendancy of women is questioned by the male dominated society and the position of rural female remains secondary in all aspects of life. Rural female youths in many cases have to marry below the stipulated age because of family pressure and obsolete norms of the community. The higher death rate of the rural female youths indicates the lack of availability of proper medical facilities during pregnancy and delivery, poor diet and lack of care of their family members towards their health. Early motherhood combined with lack of proper education and inadequate physical and mental maturity will compound the problems of women. There is a dire need to motivate the rural female youth to take part in her decision making. With the implementation of employment generating schemes, efforts should also be made to sensitise the rural youths on various social issues. The mass media, whose influence on society is quite significant, should be prevailed upon to increase the focus on developmental issues and social concerns.

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

Love of nature in winter for huge tourism influx in Kashmir

■ MOHAMMAD HANIEF

Nature knows its course best. Every season has its own importance and utility.

No season is less important than others. One season opens the smooth passage for the other to flourish. Winter is the fourth season of the four well-known seasons of Kashmir. It follows autumn and lasts from December to February.

Kashmir in winter is a breathtakingly beautiful destination with a picturesque wonderland covered with pristine winter snow. The snow-capped mountains and frozen lakes create a stunning backdrop against the clear blue skies, which makes it a perfect destination for winter lovers.

Kashmir in winter not only evolves as a bustling hub for winter sports and activities in the season but is also known for its region's rich cultural heritage and warm hospitality, making it a must-visit winter destination. Although there are multiple places and activities to visit in Kashmir during the winter season.

There are a plethora of places to visit in Kashmir during the winter, and each of them offers something unique. Snow-draped mountains create the perfect backdrop for ancient shrines, frozen lakes beckon adventurers for a chilly walk, and the bare Chinar trees stand as silent sentinels of the changing seasons. Every nook and corner of Jammu and Kashmir in winter holds a story waiting to be discovered.

While the views alone can leave one spellbound, there's no shortage of things to do in Kashmir during the colder months. From thrilling snow sports to savouring traditional Kashmiri winter dishes, there's something for every traveler's taste.

Traditionally the period of winters is primarily divided into three stages in Kashmir. The first phase starts with a period of 40 days

starting from December 21, it is a harsh period and is known as 'Chillai Kalan'. This is followed by another phase of 20 days which usually is considered to be less intense in terms of the cold and is known as Chillai Khurd. Finally the last phase is of 10 days, which is even less harsh and is locally known as Chille Bache.

Though the harsh winter period in Kashmir commences from 21st of December but the preparations are made in autumn months of September and October because people are aware about the miseries it brings with its onset. Making of charcoal, drying of vegetables to make Alla heache (Dried bottle gourd), Wangan heache (Dried brinjal), Reantwangan heache (Dried tomatoes), Hoch palak (dried spinach), Hokh hakth (Dried collard green), Heand (Dried Dandelion leaves) etc etc have been the centuries old traditional practice of Kashmiris. Though the drying of vegetables has now been declining among masses but still a large proportion of Kashmiri population is making these delicious dishes in this period.

Winter is the coldest season of year. During this season the sun loses its heat and brightness and often remains hidden behind clouds, fog or mist. The temperature is usually around freezing point. It's usually a cruel and an unpleasant season though it has a charm of its own.

In winter, the valley seems to be dressed in white overalls. The streets, bazaars, fields, gardens and roofs are all covered with snow. Water freezes and it is icy everywhere. Birds, beasts, cattle and other creatures are unwilling to roam about due to the cold weather.

As soon as winter sets in, the business hustle and bustle declines. The schools and colleges remain closed in winter almost for two and a half or sometimes for three months. Sometimes due to heavy snowfall and ava-

lanches, the valley gets cut off from the rest of the country for a long time.

Though not as charming as in spring, Kashmir is still attractive during winter. The snow-covered slopes of Gulmarg and other like places attract tourists all over the place country and abroad for skating and skiing.

Srinagar, Kashmir's jewel crown changes into a winter wonderland throughout the colder months. Its stunning gardens, tranquil lakes, and bustling bazaars steal everyone's heart making winter in Kashmir even more remarkable.

Gulmarg which literally translates to "flower meadow" is a skier's dream come true. Gulmarg is a must-see during winter in Kashmir thanks to its ski resorts and the world's second-highest working cable car.

Gulmarg offers an exciting, thrilling, and adventurous journey covered with pristine slopes and breathtaking views, leading to an eye-pleasant, picturesque scenario with a touch of adventure. Additionally, planning a trip to Kashmir in the winter might help to experience nature's fresh snowfall, making it the best time to visit Kashmir for snowfall.

Most travelers, especially during the winter, prefer the Gulmarg Kashmir trip to take part in various winter activities like skiing and snowboarding. The town gets attention from across the world because of its top-notch ski resorts and pristine slopes.

A charming town nestled in the Himalayas, Pahalgam. With its clear rivers and towering meadows, it is a picture of unspoiled beauty. The peace of Pahalgam personifies winter in Kashmir.

A mere 22 km from Srinagar, Dachigam is a haven for wildlife enthusiasts. The name of this wildlife sanctuary in Kashmir translates to 'Ten Villages' symbolizing the ten villages that were relocated for its formation. Winter

in Kashmir here means spotting the endangered Hangul deer against the backdrop of snow.

Sonamarg or 'Golden Meadow' stands out for its enchanting beauty. The Sindh River meandering through the valley abounds with trout and mahseer, making it a picture of idyllic beauty during winter in Kashmir.

Fifteen or fifty, no matter the age, nobody can resist the charm of a good old snowball fight! Winter in Kashmir takes this fun to another level, especially in Gulmarg. The thick, fluffy blankets of snow offer the perfect battleground for an epic snow war.

Trekking in the winter might sound a bit scary, but the lure of walking on a frozen lake is something else! Winter in Kashmir is the time when the daredevils trek to see frozen lakes each more magnificent than the next.

The cold hearty outdoors calls for some warm and hearty meals indoors. Wazwan is not just a meal; it's a celebration of flavours and culinary art. A multi-course meal, it's something that every traveler must relish.

Winter in Kashmir is not just about cold and snow; it's also the season of festivities. Festivals in Kashmir light up with their traditional festivals. Whether it's a local fair, a religious ceremony, or a cultural festival, the spirit is contagious.

Winter in Kashmir transforms the valley into a magical realm adorned with pristine snow. The landscape, veiled in white, captivates with its ethereal beauty. This season, from November to February, is marked by bone-chilling temperatures, often reaching sub-zero levels. Yet, the Kashmiris embrace the cold with warmth in their hearts. Kashmir captivates visitors with its natural allure and cultural richness as it remains an enchanting destination that lingers in the hearts of those fortunate enough to experience its ethereal charm.

