"To succeed in your mission, you must have single-minded devotion to your goal."
-A P J Abdul Kalam

ELDERS NEED RESPECT

Today, on one hand, people have started considering themselves more advanced and educated, on the other hand, there is a breakdown in relationships. Elders do not get due respect.

It is our responsibility to respect the elders. Today everything is because of them, seeing their condition, one should not condemn or despise them. It is our supreme religion to serve and welcome them. Nowadays the cases of hurting their mentality are increasing very fast. It is a matter of great shame and condemnation that the children are ignoring the elderly parents, the cases of disrespecting them and not serving them are increasing very fast.

After retiring from their profession, business, service at the age of sixty years, the elders mix more and more with their own peers. When they meet each other, they make good use of the time by listening to past or popular stories from outside the house. In his life, he narrates the sweet and bitter experiences of the past and the present and spends the rest of his life laughing happily. They become their own group.

The group of elders knows that we have retired from every job, business and service but have not retired from life yet. Don't know how much stage of life is left. Everyone is sad to retire prematurely, but the rest of the life should be spent happily, it definitely remains the subject of their thoughts.

They want to spend the rest of their life comfortably and peacefully. But can they really do it? This is a great question?

Veterans Day Special

Old people away from home

■ **DR. SATYAWAN SAURABH**

In the changing environment, nuclear families are keeping the elders away from the threshold of the house. Children have started liking Pubji instead of grandmother's story, elders have longed to talk to their children. They feel lonely in some corner of the house. They are becoming victims. In such a situation, their mental-economic-social problems are increasing. Pension is decreasing in front of inflation. There is a need to bring separate schemes for the elderly by including the elderly in the Ayushman Yojana along with their health care.

The elders of the house are called the foundation of the family, keeping in mind the experience of the elders, they should be consulted. His affection and love are priceless. The elderly are increasing rapidly in our country, but the resources available for them are decreasing. In such a situation, it becomes the responsibility of all of us that instead of keeping them aside, they should be integrated into the life of the communities to take care of them physically and mentally, where they can contribute substantially to improving the social conditions. It is very important to try to convert the 'problem' of the elderly into a 'solution'.

As the country's aging population and health challenges emerge, the largest comprehensive national survey in the country has been conducted to scientifically examine the health, economic, and social determinants and consequences of the aging population in India. This is India's first and the world's largest survey to date, which provides longitudinal databases to formulate policies and programs for the elderly population on parameters of social, health, and economic well-being. It includes a representative sample of countries and states, a socio-economic profile, comprehensive, contextual focus, longitudinal design, data collection, quality control, and use of Computer Assisted Personal Interviewing (CAPI) technology for Geographic Information System (GIS). This will lead to synergy in various national health programs.

Keeping in view the emerging trends in the demographic, socio-economic, and other relevant areas in the country, the Ministry of Social Justice and Empowerment is formulating a National Policy for Senior Citizens, which will cover issues such as financial and food security, health care, and nutrition. has been done, the future population in a developing India will be healthier and live longer. Research indicates that 12% of India's population will be above the age of 60 by 2030 and according to the United Nations Population Fund; This is expected to increase to 19.4% by 2050.

There are going to be more women than men in the 60+ age group. Increasing longevity has led to an increase in the number of people over the age of 80, accounting for about 11 million people. With nearly 6 lakh people above the age of 100, India will have the largest number of people by 2050. The number of senior citizens is expected to increase from 10.38 crore in 2011 to 17.3 crore in 2026 and 30 crore in 2050. In such a situation, the need for programs for their welfare increases.

increase in life expectancy, nuclearization of families, dependence on others for their day-to-day maintenance, and age-related difficulties; The life of elderly people is a difficult challenge. The problem is compounded for older women due to greater economic dependence. In rural areas, where 70% of the elderly live, economic reasons and poor quality of medical services leads to a serious situation, especially for those over 80 years of age. 5.1 crore elderly population is living below the poverty line and due to increasing crimes against senior citizens, the condition of elderly people is pathetic.

The percentage of senior citizens of India has been increasing at an increasing rate in recent years and this trend is likely to continue. According to the State of World Population 2019 report, six percent of India's population was 65 years and above. The increase in life expectancy, though desirable, has brought new challenges to the modern world. The problem of increasing population has become a matter of concern for many countries today. Provisions for pensions and healthcare are falling short of the budget. Home to over 100 million elderly and the number expected to triple over the next three decades, India has many challenges to overcome. In the changing environment, nuclear families are keeping the elderly away from the threshold of the house. Children have started liking PUBG instead of grandmother's story, elders have longed to talk to their children. They are falling prey to loneliness in some corners of the house. In such a situation, their mental-economic-social problems are increasing. Pension is decreasing in front of inflation. There is a dire need to bring separate schemes for the elderly along with their health care by including the elderly in the Ayushman Yojana. So that in every household the elderly are seen as a blessing and not a burden.

Legends of Ramban-Seven Brahmans of Mansar

■ **ROBIN KOUL**

Relevance Abstract: Ramban is the land which is related to nagas since eternal times. Every area has its Kuldevta or Grahmdevta among one of the twenty-two sons of Nag Vasuki. Nagas have played an important role in the formation of the cultural, religious and social fabric of society in Ramban. Nagas are considered aboriginal settlers in the whole of northern India. Over a period of time they were considered as supernatural beings who can control the elements of nature at their will. They had the power to protect and to destroy. People started worshipping them in awe and in return, those nagas protected them and fulfilled their wishes in one way or the other. But sometimes human covetousness turned to devastate that relation of mutual trust which in turn led to great calamities among the whole societies and sometimes turned the whole of the kingdoms in rubbles.

Legend Part I: One of the legends states a story, when around the twelfth century the whole of the landmass of Maitra also known as Govindpura started sinking because of a landslide, summoned by the wrath of a very powerful Naga known as Cleu Naga. It is said that the height of present Maitra was as par to the height of today's Neera and Falthi villages.

The land was saved by the sacrifice of seven Brahmans who laid their lives for the safeguard of humanity and people of Govindpura following the highest tradition of sacrificing even one's own life to defend the life of the masses.

The temple dedicated to those Seven Brahmans is located just in front of today's DC office Ramban. This temple constitutes the idols of Seven Brahmans and is revered as a very holy place in Maitra area. It is the local custom that the first part of the newly harvested crop is offered to this temple first. Neighbourhood people also organize a Bandara at the Mansar Devta temple annually.

It is said that in ancient times travellers used to follow the route through Govindpura towards Kashmir. People here were generous

Seven Brahmans- Mansar Devta

and offered food and shelter to the travellers. It is said that seven Brahmans from Mansar used to travel for Amaranth Yatra every year. They halt at Maitra on their onward and return journey. People of this place used to provide them with food and a place to rest.

Once they were returning from their pilgrimage, and while reaching Govindpura, they found that the whole of the landmass was sinking towards the Chandra Bhaga (Chenab) River. People in this village were lamenting the loss of their homes and livestock. Their lives were endangered. But they were helpless. It was a disastrous slide. Discovering the pitiful state of people, they decided to help those masses who were feeding them for years in their journey. They started a sacrificial Yagya at a place. But the sliding didn't stop. At this, one of the Brahman gave his Praan Aahuti (Life sacrifice) to stop the landslide. But nothing happened. Then the second Brahmin followed him, still nothing happened and following the suit, rest of the Brahmans too sacrificed their life at the Hawan Kund (Fire Pit). With that the landslide stopped immediately. And the place where they sacrificed their lives, idols, was commemorated in their memory so that future generations can remember their sacrifice for the people of Maitra.

Legend Part II: The reason behind this calamitous landslide was the ignoble greed of a human being. Legends say that this area was under the protection of a powerful Naga Known as Cleu Naga. Who reside in Madhani of Balouth area. His caretaker was a priest known as Govind who was devoted to that Naga Deity. He worshiped and took care of him every day with a pious heart. He offers him a bowl of milk every day. Happy with his devotion, Naga used to present him a gold coin daily, inside the empty milk bowl, in the form of his blessings. That priest became very rich and had a good influence in the area. The area was known as Govinpura, following his fame. He used to help the needy and serve the travellers passing through the area.

Once, Brahman has to attend some work far away. Without finding any other option he instructed his son about the daily rituals and told him to follow those strictly. He also told him not to look back when the Naga will put the gold coin in the milk container. Son adhered to the instructions of his father strictly. And the Naga Deity kept the gold coin in the container every day. This kept going for a few days until the seed of greed got germinated in the heart of the young Brahman. He wanted to capture the whole treasure of the Naga. Next morning when Naga finished his milk and put the coin in the bowl, with the sound of clinking, the boy turned back and killed Naga with the Darati (sickle) hidden under his cloth. At the same moment the sky turned black. It started raining with thunder and lightning in the sky. A cloudburst occurred in the mountains and the Govandpura started sinking down. Lightning struck the Brahman son.

Brahman, though at a far place, had an intuition that something terribly wrong had happened at his home. He started running towards his place and after reaching found the Naga and his son dead. He repented and asked the deity to forgive him and stop the landslide. Nothing happened. But by God's will, that time those Seven Brahmans from Mansar were returning back from the Yatra and saved the people, by sacrificing their lives. Priest Govinda did reparation with severe penance for years. Then once in his dream Naga Cleu came and said he had forgiven him and Govindpura. He said to priest Govind, to worship him at his place and promised to give the boon of rain when the locals will need for their crops. Still to confirm that Naga has forgiven him, the Brahman broke a branch of Deodar tree and planted it upside down. He prayed that if that Naga deity had forgiven him that tree would grow. People around the place called that tree "Ulta Deor". Yatra to the holy place is also conducted around 15 to 30 May according to the local calendar annually. The shrine of Cleu Nag Devta is situated on top of a mountain in Madhani village surrounded by a beautiful dense pine forest. There is an establishment of an ancient stone Idol in his shrine which is kept open to air surrounded by stones. Also one can visit the shrine of Trikhaddey Wali Mata just at the foot of the Cleu Nag Devta shrine towards the left flank of the mountain.

Conclusion: It is the need of the hour to keep alive the traditions and customs which our ancestors have taught us. In this modern materialistic life we are running away from our ethnic identity. Who we are and what our ancestors did for us has to be remembered, and that should be the reason of pride for all. It is the responsibility of people who believe in the sacrifice of those Brahmans, to maintain the sanctity of their temple premises. Shouldering the responsibility we can help to construct a more elaborate temple for those Brahmans. Also sharing their legend to our young generation will help to inoculate the values of our traditions and rituals in their young blood. Jai Mansar Devta! Jai Ramban!

Integrated Approach for Parthenium Management

■ **DR. BANARSI LAL**

Every year 16-22nd of August is celebrated as the Parthenium Awareness Week across India by the agricultural institutions across the nation. This week is celebrated by organising various awareness-cum-training programmes, campaigns, rallies, debates, essay competitions etc. by the various agricultural institutions. Through this programme people are guided how to eradicate this weed by manual, biological and chemical practices. Various posters, folders, books, video films etc. on Parthenium management are also provided to the stakeholders. Parthenium hysterophorus is commonly known as congress grass or carrot weed. It is also called as gajar ghas, ragweed, white cap or top, gajari, chatak candani, nakshtra gida, safed topi etc. It is most commonly called as 'gajar ghas' as it appears like carrot plant. It is herbaceous, an annual plant belonging to subfamily Heliantheae and family Asteraceae (Compositae).This weed has attained the status of "Worst Weed" It is a deadly weed infesting cropped and non-cropped areas. It has been observed that its infestation causes yield losses up to 40 per cent in several crops and reduces forage production up to 90 per cent. It is an aggressive annual herbaceous plant which has been widely dispersed in both the tropical and sub-tropical areas. This weed rapidly covers the new surroundings and poses a serious threat to our environment and biodiversity. This weed has been rapidly spreading from the last two decades. Parthenium weed has been categorised as "Cosmopolitan weed", "National culprit" and "National health hazard" due to its serious environmental threats. Earlier it was considered as a weed of wasteland but now it has invaded almost every crop. Initially it was considered a problem in the crops of rain fed areas only but with the increase in irrigation facility, it germinates throughout the season. Parthenium causes inhibition of nodulation in legumes. Pulses have little impact in terms of smothering effect on parthenium as the crops are slow growing and short statured in nature.

Union Territory of Jammu And Kashmir is northernmost territory of India and its major part is situated in the Himalayan Mountains. It is also considered as the heaven on the Earth. J&K is blessed with immense natural beauty and most of its land is under orchards, pastures, grasslands, forests and wasteland ecosystems. As most of these lands are not used for frequent cultivation, the obnoxious weed like Parthenium hysterophorus (Congress grass) has invaded most of these areas. This is regarded as the worst weed because of its invasiveness, potential for spread and economic and environmental hazards. It is noxious because it is highly adaptable to almost all types of environmental conditions and can invade all types of lands, causes high losses in the yield of crops. This weed forms dense, impenetrable thickets and reduces the productivity of crops, pastures, orchards and forestry plantations by its competition for resources and allelopathic effects. The low productivity of these ecosystems lead to scarcity of food, fuel wood, fodder, fruits, monkey menace and migration of rural people to urban areas in search of jobs after leaving the land fallow. However, the majority of people of J&K depend upon their subsistence needs on such cultivated, uncultivated and degraded lands. Productivity of such lands can be restored by managing this obnoxious weed with the available technologies. I have made some efforts to discuss the biology of this obnoxious weed, its ecological impacts and management techniques. This troublesome weed has high rate of dispersal and adaptation to adverse conditions. Consequently, this weed has led to shrinkage of grazing area for animals, reduction in productivity crops and grasslands, threat to plant biodiversity, reduced growth of newly planted trees in manmade forests and interference in succession of natural forests which act as hiding place for wild animals and threat to ecology of J&K. This weed is now spreading rapidly its tentacles in agricultural lands, forests and pastures. It is spreading at an alarming rate in J&K and is found in almost all the districts of J&K. This weed is inversely affecting the biodiversity and ecological system of J&K. Parthenium origin is considered to be Mexico. In India, its occurrence was first noticed in Pune (Maharashtra) in 1955 and now it has spread throughout India. It is supposed to be introduced in India from the United States of America along with wheat and other cereals import. By 1972, it dispersed into the majority of the western states from Kashmir in the North to Kerala in the South. It has widely spread in India from Kargil region of Jammu and Kashmir to Port Blair in Andeman and Nicobar. It is said that it was introduced in Jammu and Kashmir in 1963 from Madhopur in Punjab across the Ravi River all along the national highway. After that it has been spread all over Jammu and Kashmir. Presently its infestation is alarming as it has covered large area in the state. It has been observed that this weed has reduced crop yields and has also affected biodiversity in J&K. It can be seen on roadside, railway tracts, vacant lands, wastelands, agricultural, horticultural and plantation crops, industrial areas, irrigation canals etc.Presently it is considered as one of the most problematic weed. Its invasion in India has been estimated to be about 35 million hectares. It has wide adaptability to climate and soil conditions. It grows luxuriantly and does not allow any other vegetation nearby or underneath. It grows even in the Central Himalayan Mountains at an elevation of about 2000m above MSL. It has also been found to occupy large area of pasture land and hence reducing the fodder availability to animals. The average height of parthenium plant is 60cm-1.5m and the average plant population is 112-828 per square meter. It is deep-rooted ,much branched and dicotyledonous weed plant. A single healthy plant can produce about 15000-25000 seeds.

Parthenium causes health problems in humans and animals. It has been observed that any part of the plant (even root) can cause the subsequent risk of allergic reactions. In humans it causes health hazards like skin allergy (dermatitis), hay fever, asthma and bronchitis with flowers, seeds and even hair on leaves. Allergic papules are observed in school boys when they volunteered for uprooting parthenium. Animals are equally prone to the harmful effect of the weed. In dry season, when the animals do not get palatable species in grazing lands, they are forced to feed on parthenium. As a result milk taste becomes bitter and they suffer with ulcers in mouth and intestine. Whenever animals walk or graze through parthenium, their udders are inflamed and they suffer with fever and rashes. Histopathology of the kidney and liver revealed degenerative changes and necrosis. The milk consumption of the animals grazing around parthenium invaded fields is hazardous to man. Some animals feeding on parthenium are died due to acute dysentery, itching, eryhematous, development of oedema around eyelids, dorsum of tongue, loss of hair etc. Parthenin is the chief chemical (0.3%) found in the weed.

The manual removal is effective if adapted before flowering. Uprooting the weed manually when the soil is wet and slashing with word, collecting and burning the weed before flowering are some of the means its manual control. Community efforts involving all sections of the society are needed to manage the parthenium. The spraying of a solution of common salt (Sodium Chloride) at 15-20 per cent concentration has been found very effective. Applications of herbicides like glyphosate (1-1.5%) for total vegetation control or metribuzin (0.3-0.5%) if grasses are to be saved in non-agricultural land are considered effective in preventing this weed spread. It can also be controlled by the use of bio agent Mexican beetle (Zygogramma bicolorata) as it is natural, self sustaining, inexpensive and is ideally suited to non-crop situations and wastelands. This bio agent remains most active during rainy season and it completely controls the weed. The plant species like Cassia tara, Cassia seriea, Amaranthus asper, Malva pustulata etc. have capability to replace parthenium. The other way to manage parthenium by uprooting it before flowering and make compost by pit method. It can also be used for vermicomposting. Farmers can make good quality compost as it does not need special equipments and infrastructure. It can also be used in papermaking, an antifeedant and phagostimulants. National Research Centre for Weed Science, Jabalpur (M.P.) organises many awareness programmes throughout the country by involving Krishi Vigyan Kendras, institutes under ICAR, environmental agencies, NGOs, schools etc. Sher-e-Kashmir University of Agricultural Sciences and Technology, Jammu (SKUAST-J) also organises such programmes and feedback from the stakeholders proved that people are really interested to curb this menace. SKUAST-Jammu also organises the awareness week on parthenium management from 16-22nd of August. Krishi Vigyan Kendras of SKUAST-J campaigns at different places of Jammu province including schools and motivate the people to eradicate this weed. People from all sections of society should actively participate to curb this obnoxious weed.

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

YOUR COLUMN

Bio diverse Habitat on Earth

Dear Editor,

A recent study has found that soil is home to 59 per cent of all life on Earth, from an insect feeding on the soil surface to a tiny microbe nestled in a soil pore. This discovery crowns soil as the most biodiverse habitat on the planet. The paper estimates that around 2 million species of arthropod (think insects and spiders) inhabit the soil - some 30 per cent of all known arthropod species. There are far fewer species of soil specialists such as enchytraeidae (resembling mini earthworms) and oligochaeta (worms), with only 770 and 6,000 species respectively. That might not seem like a lot, but it still represents around 98 per cent and 63 per cent of these animal groups.

The variety of mammals living in soil is, by comparison, quite limited. Only 3.8 per cent of mammal species are associated with this habitat. On the other hand, 85 per cent of plants have their roots buried in the soil and around 43 per cent of nematode (tiny worms) species call soil their home, or reside within the plants and animals that inhabit it. However, the number of animal and plant species that live in soil are dwarfed by microscopic organisms.

The researchers estimate that a mind-blowing 430 million species (or more than 50 per cent) of bacteria and 5.6 million species (or 90 per cent) of fungi have made soil their home. But perhaps more important than the raw numbers are the functions that this biodiversity performs. The life within the soil not only helps to produce the food we eat, it also plays a crucial role in holding the soil together and even gives us potential sources for new antibiotics and medicines.

Helping plants grow Small animals, including earthworms and springtails, break down plant material and other forms of organic matter, such as dead insects, and incorporate them into the soil. This process releases the nutrients that most plants rely on to grow. But it's not the only way that soil organisms help plants gain more nutrition. Mycorrhizal fungi (a species of fungi that grow in association with plant roots), for instance, embed themselves in the roots of plants where they extract energy-rich compounds. In return, the fungi help plants expand their reach in the soil, allowing them to access a greater amount of nutrients.

Other species that are vital for food production include nitrogen-fixing bacteria. They are commonly associated with legumes such as beans and clover. These bacteria convert nitrogen gas from the atmosphere into compounds that the plants can use - an undertaking that can otherwise only be done synthetically, using vast amounts of energy.

As organisms penetrate the soil, whether by burrowing, creating nests or as a means of anchoring themselves, they engineer pathways through the soil and contribute to its structure. Notable examples include termites rearranging the soil to create channels for air and water to filter through, as well as roots and root hairs enmeshing soil. The incorporation of decomposed plant material into the soil serves a similarly crucial purpose. It helps to hold the soil together and creates pores that protect the soil from erosion and increase its capacity to store water. Some of this organic material is also locked away with soil minerals, leading to the storage of carbon. In fact, soils hold three times as much carbon as vegetation and twice as much as the atmosphere.

In many cases, these functions involve a variety of species. Having multiple species perform the same function offers a safety net if conditions change, such as during a drought or a flood. Some species are more resilient to these events than others. When conditions change, unaffected organisms within the soil can step in to fulfil the same functions as those that might have suffered - a process ecologists call "functional redundancy". This improves the ability of an ecosystem, such as soil, to withstand and recover from environmental shocks. Soil biodiversity is also a key reservoir for new drugs.

Soil bacteria have produced most of our antibiotics, including streptomycin, chloramphenicol and tetracycline. Unfortunately, the rise of antibiotic resistance has rendered many early antibiotics ineffective. However, searching through different soils is yielding promising new antibiotics with the potential to kill "superbugs" that are resistant to existing drugs. Soil biodiversity plays an important role in producing the food we eat, sustaining soil health and helping to deliver a range of other services, from sourcing medicines to reducing the impact of floods and droughts.

Vijay Garg