

• We think these big people are very happy, but the truth is they are worse than us. We are just worried about one thing hunger; they have a thousand worries. -Munshi Premchand



### **AB DIGITAL MISSION's SUCCESS**

ver 25 crore health records of individuals have been linked digitally to Ayushman Bharat Health Account under the National Health Authority's flagship scheme Ayushman Bharat Digital Mission. These records can be easily accessed and managed by people using any of the Ayushman Bharat Digital Mission (ABDM) enabled health applications. The digitally available health records will enable the Ayushman Bharat Health Account (ABHA) holders in availing paper-less health services across the ABDM network, a statement by the National Health Authority (NHA) said on Tuesday.

Individuals can use their Personal Health Records (PHR) apps to access their records across different health facilities like hospitals, clinics, diagnostic labs, among others, and store them in the app. They can also digitally share the relevant records with verified healthcare providers over the ABDM network. This enables completely paper-less exchange of records in a secure manner while doing away with the hassles of searching for physical medical documents or worry of losing old records. The healthcare providers get consented access to detailed patient history, thereby helping them in better clinical decision making.

Speaking on the milestone, the National Health Authority said digitisation of physical records is crucial to the objective of building an inter-operable and accessible healthcare ecosystem.

"The speed at which health records are being made more accessible via ABHA linking indicates the sincerity of all stakeholders as well as the robustness and scalability of the underlying technology.

The objective of ABDM can be achieved with collaborative efforts from majority stakeholders that benefit the end patients," it said. Elaborating further on the importance of

ABHA-linked health records, the NHA said patients are empowered with ready access to their records and the choice of sharing selected records.

"This eliminates the need of the patient to travel to the physical healthcare facility for initial or follow-up consultations. With patients/individuals at the centre, we are enabling easy exchange of information across different applications and platforms, thus bringing more efficiency and accessibility in delivery of healthcare services," it added. The digital linking of health records has been making tremendous progress with active involvement at state/UT level. In the last 40 days, the number of health records linked to ABHA have jumped from 4 crore (as on January 18) to 25 crore (as on February 27).

The health records linkage also got a major push by integration of ABHA with the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PM-JAY). With over 9.8 crore AB PM-JAY health records linked to ABHA, the scheme beneficiaries get portable and digital records which they can access and share online in a secure manner. Additionally, health programmes under the Government of Andhra Pradesh, CoWIN and Reproductive and Child Health (RCH) scheme under the Ministry of Health, eHospital by NIC, eSushrut by CDAC and TeCHO by the Government of Gujarat are among other key schemes which are digitally linking health records of the respective beneficiaries. Various private players like Orbi Health Private Limited, Hitachi MGRM Net Ltd, Driefcase Health-tech Private Limited, Karkinos Healthcare Private Limited, Paytm Mini and Bajaj Finserv Health are also contributing to ABHA-linked health records

# **Promoting medicinal & aromatics plants**

#### G L KHAJURIA

odern Medicine is a negation of health 'Ivan Illich'. Ever since the dawn of civilization, the man has remained wonderstruck viewing its surrounds, the flora and fauna, the natural bounties who alongside subsist with him. And at times, he wondered as to how these animals and plants are less disease free with vibrant, lush green and flora. This has left him with regenerating perceptions of all hues and years have rolled by and these mysteries till date remained as folded as ever before. Undoubtedly, nature is a greater healer and its mysteries are so far hidden and folded. Unlike men, whom there is a team of doctors for treatment and then what about for those innocent and voiceless animals and birds. Surely, hunters and poachers are definitely there in the process! And then why the nature should come to their rescue of human kind. One also wonders at times or gets more curious to know how were the names given to the plants and how do we name them today is again a folded mystery. Presumably enough, the oldest names given must be having in the remote past some relevance when no language existed barring few broken words which off shooted, of course, the beginning of plants nomenclature, for they are as obscure as the record of earliest civilization. The first book dealing with plants was directly taken from early Greek or Latin manuscripts or more so ancient translations into those classical languages. The plant names are mostly Greek or Latin but of course, some seemed to be unaltered barbarous names used by not too civilized tribes of the time. However, the first attempt to scientifically nomenclaturise the plants was made by renowned/celebrated Greek, Philosopher 'Theophrastus' (370-287 B.C.) who was pupil of Aristotle. He had vide intellectual interests of various subjects which he wrote on biology where he described around 500 species of plants in his botanical treatise " on the study of plants: and " on the causes of plants", the main thrust being on the medicinal plants. Later, Pliny the Elder(23-79 A.D.) described about 1000 species in his book "Historia Naturals" and at the same time a Military Physician 'Diesecaridas' described around 600 Mediterranean medicinal plants in his book entitled 'Materia Medica' in the early part of 16th century. Man's curiosity ever since remained in the run-race in exploring more and more medicinal plants and many biologists of whom the few et al Morrison carolus, John Ray Linnaeus and Benthom and Hooker (1830-1884) remained in the lead. Though it seems strange and intricate when one talks of botanical names, yet at the same time these occupy extremely interesting and instructive part in so far as modern 'Avurveda System of Medicine' is concerned, apart from 'Unani' and siddha. This system of medicines have had an inte-

gral part when the modern allopathy had no longer surfaced and that's why this



herbal system occupies a unique placement amongst the most proclaimed systems of medicines so much so that the 'World Health organization'(WHO) has fully recognized its values in its broader spectrum. In India, where around 70 per cent of population is below poverty line, 'herbal system' (Ayurveda) is perhaps the last hope. The system though having no side effects unlike other system of medicines. It is matter of utmost pride that India in general and the Himalayan states in particular are the richest source of medicinal and aromatic plants though human interferences in many a ways are diminishing the rich, vide, varied resources which warrants their due preservation and enhancement and that's why there is endless scope of Ayurvedic medicines abroad which fetches hefty dividends, besides providing undesirable side- effects:

Strange are the ways of nature that there exists a strong linkage between the herbs, shrubs climbers, plants and the trees with the variety of ailments as for example, Belladonna ( meaning beautiful lady) was employed in Italy by ladies to give softness to their eyes and the same was for Potentilla-a panacea for all cures. There is a vide diversification of plants in times long past when they received their names because of medicinal properties real or supposed to assuage grief and so on the list goes endlessly." Of the few, the most important 'Avurvedic herbs, shrubs, climbers, plants and the trees are briefed down below viz-a-viz their medicinal uses:

Picorhhiza Kurrora: Locally spoken as 'Kour' is perennial herb found in Himalayas (2500-4500) is the best herb for liver ailments, roots however, contain glycoside. Liv-52, Livosin and heptaguards are the Ayurvedic drugs prepared from this.

Valeriana Wallichina (Mushakbala) is predominantly the most important medicinal plant, apart from its uses in perfumery/dhoop. Whithania Somnifera (Ashwagandha)

(L) Dunsal (1725): belongs to  $\mathbf{F}$ Solaceceae, finds its usefulness to rejuvenate therapy, excessive emancipation, bronchial asthama, insomnia and cardiac disorders.

Tuxus bacatta: A very important conifer species mostly confined to Himalaya region (Tangmarg belt). A life saving drug is manufactured out of bark and leaves of plants for the treatment cancer patients.

Macrotomia bentham: belonging to the F Boragiecae habitats Gurez" - Kahmir valley reaching an altitudes up o 1200 ft. It finds its usefulness in cardiac ailments. apart from fevers and throat troubles.

Chrysanthimum cincerifolium also called Pyrethrum is belonging to composite F. (Sun Flower) is injurious to warm-blooded and toxic insects and is mostly used as insecticides and flits. Apart from the most prominent medicinal/aromatic plants, also include, Hibiscus esculentas, Acasia Arabica, Achyranthes aspera, Adhatoda vasica, Agave Americana(sisal), Aloe Vera, Aloe Vulgaris, Rauwalfia' Serpetina(cobra plant), Datura, Stramonium, viola odorata, Digitalis purpurea, cannabis sativa, Aegle marmelas(Bel), Various Artimisias, Vitex negundu(Bana), Cassa fistula (Golden Shower), Flacourtia romonchhi, indigoferas, Mallotus philippinenisis, Phylnthus emblica, Benninghausinia albifloria(pisumar Buti) - an insecticide so on and so forth.

Though the fact goes that this vide, varied medicinal/aromatic, herbs of plant kingdom are sprawling world over in general but fact still remains that our tropical, sub Himalayan and the Himalayan region are bountiful of the vast resources which remain hidden and folded all over the globe. Our 'Regional Research Laboratories" and others pharmaceutical in the arena should pick up the thread in exploring this vast potential which forms the very fundamental source of our Indian System of Medicines" do, de facto, stand the test of the day. And these herbs, shrubs and other medicinal/aromatic

plants are fastly depleting, obviously for two reasons.

First, that modern man wants quick relief which only allopathic system of medicines can provide too rapidly, but going by the side-effects, the results are alarmingly astonishing . Herbal treatments though go slow, but the results are success-oriented with zero side-effects and that is why Hippocrates, the father of Ayurvedic system of Medicines depended on nature for cures. And alongside in not promoting and developing these plants will resultantly vanish this vast treasure-house of medicinal kingdom. It is no doubt a fact that the Ministry of forests and environment, Govt of India has opened all avenues in almost all states and a separate wing by the name and claim as "Minor forest produce: to and promote these exaggerate medicinal/aromatic plants but here too lot of efforts coupled with and supported by funding is the call of the hour. India, of course, should feel proud that our world renowned Pharmaceuticals et al. Himalayan drug stores, Dabur, Chark etc. are rendering yeoman's services and their export potential is far exceedingly catching momentum and their medicinal outflow world over is fetching hefty dividends. Yet the task is not over and we have to make every possible attempt to grow and enhance the equilibrium of the vast, varied treasure to its proximity and hence then we can be proud of our achievements. Secondly, none can deny the fact that with ongoing onslaught of dwindling and decimation of forest cover together with diminishing voiceless wildlife, the medicinal and aromatic plant kingdom is still at greater risk. This being because of the fact that word minor (minor forest produce MFP) is so minor that its inescapability is too easy to be carried away by the greedy and overneedy men. As such, all out efforts and surveillance need to be actively initiated by all and one as per the laid down rules in the "Constitution of India" enunciated in general and the forest Deptt has to play an optimum role in curbing the menace of smuggling of Kuth, Discoria and its ilk which are under the process of being smuggled out. In the past many decades, credit, de facto goes in favor of Forest Deptt. When Optimum number of cases has been taken into cognizance and action followed thereto rapidly. Public awareness and awakening is of paramount need of the hour as it is after all public property and such a tempo will have to be continued in achieving successful results forever and ever. And with this, the writer adds over here as such: Trees, herbs, shrubs, bushes and climbers through all their parts like leaves, flowers, fruits, shade, roots, bark, smell, juice, ash and buds get engrossed into service of others and for their benefits. They can even sacrifice their lives, how blessed are the lives of these trees. (Shrimad Bhagavata Mahapurna).

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

## Will lithium lionize J&K?

#### ABID HUSSAIN RATHER

ammu and Kashmir has been continuously in headlines for something good U or bad for the past many years. Whether it is erratic weather or political instability, we have some breaking news from this region of the world. It won't be wrong to say that it has turned out to be a hot spot for journalists and media platforms. Despite being conferred with the titles like 'Paradise on Earth', 'Switzerland of Asia' or 'Crown of India' due to its unparalleled scenic natural beauty, lush green forests and valleys, lofty and majestic mountain ranges, glistening lakes, pristine rivers and streams and verdant meadows, Jammu and Kashmir has remained economically underdeveloped as compared to other parts of the country due to its political instability and volatility as it has not been paid necessitous attention from the concerned authorities which it demands. It is very unfortunate on the part of Kashmiris that they have been suffering from many mental traumas and tensions due to the political tension prevailing here. But fortunately, two weeks ago we got good news from this region when on 10th February the Union Ministry of Mines announced that lithium reserves have been found in Jammu and Kashmir. The Geological Survey of India established 5.9 million tonnes of inferred lithium resources in the Salal-Haimana area of Reasi district

in Jammu and Kashmir. With this discov- recent find of 5.9 million tonnes of lithium It is pertinent to mention here that these water and soil pollutions. Reasi being a ery, it is believed that the manufacturing of could catapult it into the top three coun- reserves have been yet referred as 'inferred hilly district has a fragile ecology and rechargeable lithium based batteries for tries in the world with the highest lithium resources' which means that tonnage. reserves. Further, discovery of lithium in Jammu and Kashmir region can help address global shortage of lithium and give a boost to Indian economy by exporting lithium and its products to world market. Besides exporting, India itself heavily depends on lithium products as Central Electricity Authority of India has estimated that the country will need massive amounts of lithium for the 27GW grid-scale battery energy storage systems required by 2030. Further, it has been estimated that India has imported 165 crore lithium batteries between the financial year 2017 and the financial year 2020 which costed over \$ 3.30 billion. In 2020-21, India imported Rs.173 crore worth of lithium. With every passing year, the demand for lithium is soaring significantly as in the present technological world, the use of electronic gadgets is increasing fast and the battery technology is on rise with the emergence of EVs (electric vehicles). As India is aspiring to control the carbon emission and increase in the production of electric vehicles by 30 per cent in the coming seven years, so it is apt to say that the discovery of lithium reserves will definitely be helpful in this dimension and will strengthen, revolutionize and boost our economic and IT sectors.

hence it is highly vulnerable to catastro phes. Any change in climate due to mining may reduce access to drinking water, affect the health of the poor, and will also pose a serious threat to food security in this region which may ultimately result in human displacement. We have already example of one of the Himalayan states viz. Uttarakhand before us which has been reeling from the effects of unchecked economic activities that have devastated the environment in the state and caused many fatalities. The subsidence of Joshimath and 2021 Chamoli disaster in Uttarakhand state are the results of fiddling with the natural environment. So before extraction of lithium deposits from this region, the concerned authorities must take a balanced assessment and analysis of the high ecosensitivity of Jammu and Kashmir region as this region lies in high tectonic and disaster prone zone and they must pay their attention towards maintaining the ecological stability and balance of the region as these reserves lie around Chenab River amid tall trees and lofty mountains. The concerned authorities must make sure that if the mining of lithium deposits is done in the Reasi district in the near future it must be done in sustainable manner and due consideration should be given to environmental aspects.

electric vehicles, smart-phones, solar equipments and laptops will get a boost and cut India's dependence on lithium imports as the discovery could boost the manufacturing of rechargeable batteries for electric cars, smart-phones, and laptops and cut India's dependence on lithium imports which are currently imported from China and other countries.

Lithium- a white and silvery soft metal is also called as 'white gold' due to its high demand for rechargeable batteries. Besides, it is also used in thermonuclear reactions and making alloys with aluminum and magnesium which in turn are used in armour plating, aircrafts, bicycle frames, high speed trains etc.

When we look at the world scenario. we find that the world is facing an acute shortage of lithium due to rising demand for rechargeable batteries, which is estimated to reach two billion by 2050. It is important to mention here that lithium reserves are verv rare.

There are only 98 million tonnes of lithium globally out of which India have only 5.5 per cent of these resources while as 54 per cent of the world's lithium reserves are found in Argentina, Bolivia and Chile and collectively these three countries are known as lithium triangle of the world. India's

grade and mineral content has been estimated with a low level of confidence. So there are further stages of assessment before proven reserves of lithium can be identified in the Salal-Haimana deposit. Now from the local perspective, many questions arise on the discovery of these reserves.

Will discovery of these lithium deposits pave a way for the development of Jammu and Kashmir region and will it become a fountain of welfare for the common masses by providing employment opportunities to local people? Further, can it be expected that a genuine part of revenue collected from these reserves will be used to strengthen essential sectors of the region like education, health, road and building infrastructure etc. ? Will it be a turning point for the overall development of the concerned region? Only future times will answer these queries but we should keep positive hopes from the discovery of these deposits. Besides, we should not forget that mining of lithium has many negative impacts on local ecology and environment and it may result in many environmental hazards. This process is water extensive and it is estimated that extraction of one ton of lithium approximately requires 2.2 million lts of water. It also results in air,

## India's first World Heritage City- Ahmadabad

#### VINOD CHANDRASHEKHAR DIXIT

hmadabad city was founded on 26 February 1411 and announced as the capital on 4 March 1411 🕰 by Ahmed Shah I of Gujarat Sultanate as a new capital. UNESCO has declared Ahmadabad (Gujarat) as World Heritage City. Really one feels proud of being Amdavadi. There are many who are not aware about the various heritage places in Ahmadabad. The names of various places Monuments are found only in tourism maps and Websites. Ahmadabad rose in stature and soon began to be called the 'Garden city of Hindustan'. It flourished during the steady reign of the Sultans. The merchant class grew in affluence, and peace and stability began to attract a great number of people from surrounding areas. It is now the largest city in Gujarat and the seventh largest city in India. One would be surprised to know that Manek Chowk, named after Maneknath became the marketing complex of the new city. Kalupur, named after Begda's minister Abba

Haji Kalu, consists of a mixed population of Jains and Muslims. Usmanpura was a prosperous suburb during the Badshah period, specializing in the trade of ghee and local medicines. The era of the Sultans in Gujarat has often been called the 'Golden age of Ahmadabad'. Architecture has found its glory in Ahmadabad. The Masjid of Siddi Saved and the design of 'Jalis' has become the main advertising logos of the city.

Our heritage is all that has been passed to us by previous generations. Cultural heritage is a legacy of physical artifacts and intangible attributes of a group or society - man-made heritage. It is disheartening to note that some people, forgetting that they are doing an irreparable damage to invaluable archaeological masterpieces by inscribe their initials, names, love messages on these national treasures. We must learn to value our inheritance for reasons beyond their mere utility and their functional use. This is because each heritage is unique and exceptional; it is the responsibility of the current generation to preserve it. The conservation and protection of these monuments cannot be neglected any further. It clearly shows that cities like Ahmadabad have emerged as the prime engines of the Indian economic growth and generators of national wealth. Ahmadabad is the best of India's mega-cities the commercial capital of Guiarat, Ahmadabad has progressed steadily over the years. The reasons for this could be attributed to uninterrupted and stable power supply, No water shortage, wide and maintained roads, friendly & traditional, yet progressive people, good educational and health facilities etc. The most important is the city is a heritage city with people still living in heritage buildings in the old city that has become hosts for some of the most modern management schools. People of Ahmadabad are known for their cooperative attitude, entrepreneurship and aspiration for values. Graced by rich heritage and culture Ahmadabad offers values to the tradition and diversity. One would have observed that the Amdavadis are very fun loving and has a lot of respect for the traditions and customs of their community. It would be no exaggeration to say that in the whole world there exists no town so grand and beautiful like Ahmadabad. Ahmadabad after more than 600 years now make its presence on the international map. It is now regarded as a national pilgrimage, a symbol of nonviolence and peace. People of Ahmadabad are known for their cooperative attitude, entrepreneurship and aspiration for values. They have a great vision to take the city to dizzy heights with their business acumen and gentle mannerisms. One thing is certain that if the world today recognises Mahatma Gandhi as the apostle of peace, Ahmadabad had a major role in the making of the Mahatma. In the last 600 years, Ahmadabad has seen unpredictable changes and has developed into a megacity which is at heart of Gujarat state's development. It is nice to see that though the city has changed over the years it has sealed its historical and cultural heritage.