



2021



वनिष्रशिक्षण संस्थान एवस् रेजरज्ञ कालेज वनिष्मारी हिमाचल प्रदेश सुन्दरनारी जिलामण्डी (हि. प्रा)



Dr. Sanjay Sood, IFS Addl. Pr. CCF Research & Training, Sundernagar Distt. Mandi (HP)

Message

It gives me immense pleasure to know that the Forest Training Institute & Rangers' College, Sunder Nagar is publishing its third edition of the magazine 'Vanashree' by the Range Forest Officer Trainees. I congratulate the Institute management and the trainees for their successful endeavor.

Such publications help the trainees to express their creativity and showcase their talents other than the academics. I earnestly hope that the trainees and the readers will benefit from the contents of the magazine.

My best wishes to the 2019-21 batch of Range Forest Officers on their successful passing out from the Institute.

(Dr. Sanjay Sood)



H. K. Sarwata, IFS
Director
Forest Training Institute & Rangers' College
Sunder Nagar, Distt. Mandi (H.P.)

Message

It gives me immense pleasure to write this message for third edition of 'Vanshree', the magazine of exemplary writing and activities by the 5th batch of trainees enrolled in a 18 month certificate course for Range Forest Officer (2019–2021) in Forest Training Institute and Rangers' College, Sundernagar. The magazine is a consolidation of all the unforgettable moments cherished by the Officer Trainees during an entire course duration at Institute

Apart from the academic curriculum of vast exposure was provided through field tours including various parts of India, Sports and Games, Yoga classes, Adventure sports like snow skiing and Rock climbing, and number of other extra curricular activities for grooming overall personality of young officer trainees as Field Officer to face a plethora of field situations.

I am grateful to each one of my team number behind the scene for this wonderful Publication. Last but not least I can go to date all the officer training for Grand successful completion of course tenure amid Covid Pandemic situation and wish them good luck for your future endeavours in the Field.

(H. K. Sarwata)



Parul Sood, HPFS
Course Director cum Deputy Director
Forest Training Institute & Rangers' College
Sunder Nagar, Distt. Mandi (H.P.)

Message

It's been an immense delight to publish the third edition of 'Vanshree' Magazine by the 5th Batch (2019-21) of FRO trainees of FTI&RC, Sundernagar.

The magazine helps the trainees unleash their creativity while at the same time gives a chance to relieve the training experience by going through the glimpses of the past moments. The magazine gives the testimony of the skills of the trainees, both at academic and co-curricular level. I would also like to thank the members of the Magazine Committee for their hard work for preparing this magazine.

The training duration for this batch had been a roller coaster ride with twists and turns of COVID-19, lockdown and the consequent online training sessions and virtual tours. Nonetheless, our high spirited trainees didn't succumb to it and learnt the various aspects of forestry.

Lastly, I would like to congratulate the trainees for their accomplishments and successful completion of the training. I extend my prayers and best wishes to them for their prosperous career and bright future ahead.

(Parul Sood)

FACULTIES AND STAFF



H. K. Sarwata, IFS
Director



Dr. Kirupasankar M, IFS Former Director



Tilak Raj Sharma, HPFS Joint Director



C. L. Joshi, HPFS Joint Director



Parul Sood, HPFS Deputy Director Cum Course Director



Dr. Yogender Sharma, HPFS
Deputy Director



Chander Shekhar, HPFS Deputy Director



M. K. Negi, HPFS Deputy Director



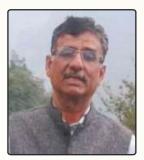
Ambrish Sharma, HPFS Divisional Manager, SNR Guest Faculty



S. K. Sen DFO (Retd.) Guest Faculty



S. K. Guleria DFO (Retd.) Guest Faculty



V.P. Pathania DFO (Retd.) Guest Faculty



Manjula Salaria Prof. HRM Guest Faculty



Deepak Bajaj Prof. Computer Guest Faculty



Samriti Pandit Prof. Mathematics Guest Faculty



Surender Nath Prof. Botany Guest Faculty



Jeet Singh Dy. Forest Ranger Asstt. Director (Construction)



Suneel Sharma Dy. Forest Ranger Asstt. Director (NRMTDS)



Kamla Devi Sr. Forest Guard Academic



Rajesh Rana Sr. Forest Guard Construction



Besari Ram Forest Guard Physical Training/Drill Instructor



Nand Lal Rao Forest Guard NRMTDS

Editorial Board



Smt. Parul Sood (HPFS)
Deputy Director cum Course Director
CHAIRPERSON



Ms. Archi Harit FRO Trainee MEMBER SECRETARY



Shailendra Solanki FRO Trainee Member



Monankur Chakma FRO Trainee Member



Ravi Kiran Sampagavi FRO Trainee Member



Shubhi Jain FRO Trainee Member



Shreyansh Jain FRO Trainee Member



Suman Chakma FRO Trainee Member

कोरोना काल

परिन्दों को सुना फूल बनते भी देखा जंगलों के किस्से मशहूर हुए रोशनी ये हवा पानी ये आस्माँ कुदरत के करिश्मे बदस्तूर हुए इस खामोशी में कुछ बाँकपन भी है कितने गिले शिकवे दूर हुए साडी दीये थाली के हैं अपने हौंसले दो चिथडों में न जाने कितने मजबूर हुए इस फर्श पर अब नींद नहीं आती कन्धों पे घर उठाए अब मज़दूर हुए वो मुँह वो हाथ ढूंढते हैं दो जून रोटी हम साबुन से घुल – धुल के मग़रूर हुए रूह में न सही घरों में ही रखना खुदा कितने मरकज़ दिल से दूर हुए कोंपले कह रही हैं आएगी ज़िन्दगी इंतज़ार लबे कुछ ज़रूर हुए

तिलक राज शर्मा संयुक्त निदेशक



बरगद - वटवृक्ष

याद हैं दोस्तो तुम्हे वो बरगद का पेड़ जहां माँ जलती थी दिया हम झूलते थे झूले और खेलते थे कई तरह के खेल। बांध देते थे कले वे पेड़ के चारो तरफ इस विश्वास से के सुरक्षित रहेंगे हमअब।

गिलहरी से लेकर सभी पंक्षियों का होता था नीड गर्म दोपहर में भी ले लेते थे नींद त्यौहारो में सिंदूर,चूड़ियों का सेहरा हैं तो कभी कहानियों में भूतो का पहरा हैं।

लेकिन उसका अस्तित्व प्रश्न चिन्ह के घेरे में है आश्चर्य किंतु उस बरगद का भविष्य भी अंधेरे में है। गांव बहुमंजिला इमारतों में तब्दील हो रहा है, नगरीकरण का दानव बरगद को भी लील रहा है।

परदादा, दादा, मां, पापा और बच्चे सभी ने देखा है, एक छोटी चिड़िया का वहां पर घोंसला है। कहती है काट दोगे तो कहां रहूंगी, कहते हैं बच्चे, बोगन विलिया और मनी प्लांट में हम नहीं रहते।

काट दोगे उस बरगद की बाहे तो हवा के बेखौफ झोंके रोज सनसनी मचाएंगे, उखाड़ फेंकोगे गर जमीन से उनकी जड़ भूख से उपजे खंजर हमारा खून बहाएंगे। इसलिए स्वयं समझो और जमाने को समझाना होगा देश में लगा हर पेड़ हर बरगद बचाना होगा।

डरो मत क्योंकि सुनी होगी चिपको वूमेन गौरा की व्यथा जिसकी याद में सुबकते है हिमाचल के देवदारो की कथा उतराखंड के जंगलों में लगती है जब भी आग, कटते—झुलसने पेड़ करते हैं बहुगुणा का इंतजार।

हम रेंजरो का सपना हो यह धरा, पेड़, पानी सब अपना हो।

चाहते हैं धरती पर बरगद, नीम, शहतूत, आम, बांस, देवदार, शीशम, हो सागवान, खेजरी, तुलसी, चंदन समशीत लहो।

हर तरफ नजर में गुलाब, पलाश, गेंदा हो चाहता हूं एक अमीर खुसरो फिरसे पैदा हो।

जो अब बरगद की छांव पर बैठे, लेटे, और कहता ना रुके अगर फिर दौसबररु— ए—जमीं अस्त अमी अस्तो अमी अस्तो अमी अस्तो

#श्रेयाश

श्रेयांश कुमार जैन रो. नं. 35 एफ. आर. ओ. ट्रेनी, मध्य प्रदेश

MR. RAY, HER AND BUTTERFLY

It all started because of her. I went to the terrace to see her standing alone and I wondered 'she may be sad', but to see her happy was indeed a surprise. Then I gazed at what she was seeing and did not have a clue, upon asking she said "look there" as she pointed to a small yet beautiful butterfly. I saw it but could not see it clearly as it was very active in sunlight. Then upon its fanciful behaviour I got frustrated & told her "it's just boring as it won't sit in one place". Then she said " just concentrate on it & it will be too good & you will enjoy it". For once I thought she was just clueless but since there was nothing to do apart from these activities, so I started to observe one butterfly. it was a beauty in blue colour, small, stupendous, silly to sit on waste but still it grabbed my attention & I began to observe it every day. Thus, it started a beautiful Chapter to my hobbies list. We both started to observe them & soon I began to know a lot more about butterflies than I could Imagine earlier. I saw Sailor, blues, tiger, yellow, whites & their moth & larvae stages and it employed my prime time. It has turned a man who doesn't usually take a photo and turned him into concentrating on photography. Since I didn't have a good camera or high-quality phone I had to improvise & started following them and went along with them in mud, ground, their host plant, buildings, and their frequent flying zones. So, it improved my leg movement to accommodate & not disturb them as they are so sensitive to vibrations and I could not believe the poses which I had to get their photo to identify them and it flashed to me only when I saw pictures of me taking butterfly photos from my friends.

It did lead to many comic moments like once I was in the corridor and I shouted Leopard and my friend's next to me were very shocked but they were relieved after knowing it's just a butterfly named 'Common Leopard'.

Soon I got to know that we have identified over 90 butterflies and we are nearing our 100th one, this rushed to

my head & so we began to even dream about it and just like how Sachin couldn't find his 100th 100, we too were unlucky as it turned into such a long dry spell & we couldn't find our 100th. But regardless due to her force & my curiosity we didn't desert our work.

Once we were on the ground at 8 AM and we thought we saw it & then to our surprise it wasn't seen properly & it was not identifiable properly, we were so frustrated that day it came to our hands but we couldn't grab it. After putting this much effort we both felt, maybe it's not so easy and we may have to wait a bit longer, I was of the opinion that it may take even longer and We must leave the effort & it will happen when it happens, so better stop going every day. Then she said "have some patience as we have waited & did so much for so long, so don't waste the effort and

just continue" and I said " I don't know", at that exact moment, in the small Corner bathing in sunshine he was sitting & I saw her face glooming with joy and it was so beautiful and the butterfly was true to its name as 'Tawny Rajah' and he was royal indeed. Upon taking the picture with the one for whom we have waited for so long we cherished that day and to this day that corner of campus reminds us of that joyful moment that we have longed for so long.

The butterflies became a beautiful chapter in my life giving me a much-awaited experience by showing a wonderful and colourful message through their life as it shows how COLOURFUL a life can be even if you live for short number of days and reminded me that It's not the number of days that matter but how you have made them feel.

*Kiran Kumar P.H.*Roll No: 13
RFO Trainee, Karnataka



THE BIG CATS

Lions and tigers are wonderful creatures to watch. These wild animals epitomize the character of being ferocious, aggressive of all the living creatures, yet submissive to a creature called human when it is kept in captive. It is always amusing besides frightening to watch these amazing creatures.

As a ranger trainee now, I have had a plethora of opportunities to get a glimpse of them during the tour of Central and western India. But now when I see them, a sense of responsibility strikes to my mind, that is to protect these cars which are at the top of the food chain in an ecological environment. These cats are endangered by poachers who exploit their pelts, meat and body parts for various commercial purposes, medicinal uses and superstitious beliefs.

Royal Bengal tigers constitute 80% of all the tiger species in the world. Indian subcontinent is the native place to these species. The first visit of the tour was to Kanha tiger reserve situated in Mandla and Balaghat districts of Madhya Pradesh. It is an abode to 125 tigers. It is difficult to erase that moment in my memory, early morning it was, we boarded Jeep for jungle Safari. I was

very much excited to get a glimpse of tiger so much so that the rate of blinking of my eyes diminished as we entered the jungle. Though it sounds hyperbole, I was immensely enthusiastic. But unfortunately, we didn't get to see a single tiger. I was very much disappointed. The next day, we were on a Safari in Panna tiger reserve which is home to 55 tigers. This time we were lucky as we sighted a tiger and a cub. The moment was an enthralling experience for me and I did fight for the binoculars to get a better view of the animal. And it was a large tiger with a majestic face and carrying a fiery attitude.

Asiatic lion is the only species of lions in India. It is restricted to Gir national park in Gujarat. During the course of the tour we visited, Gir national park also known as Sasangir. The lion population is 624 as of today. The Jeep Safari was again exciting and we were able to see a male lion stealthily camouflaged in the bushes. The lion is called the king of the jungle not because of its strength only but it's attitude of being indifferent to anyone so be it humans. It's attitude of commanding things is great. Lions are the only big cats which are social in behaviour. They generally hunt in groups. On the contrary, tigers, leopards are solitary hunters.

Lions and tigers are the most vulnerable to poaching as with other wild animals since ancient times and British era. There was a time in 19th century where there were lakhs of tigers in the country. This was reduced to the digit figures at the time of independence which is abysmal. Thanks to government efforts, today India is home to largest number of tigers. Various programmes such as project tiger, project lion etc and stringent acts like Wildlife Protection Act 1972, the number of these cats have seen a rise.

Article 51 (g) of the Indian Constitution says that it is the fundamental duty of every citizen to protect and improve the natural environment including forests and wildlife. And it is also one of the important goals of Sustainable Development Goals-2015.

As a forester it is all the more imperative for us to understand the gravity of these wild inhabitants' survival and protect and conserve these animals for which we are not joined by the government.

*L. R. Darshan*Roll No. 14
FRO Trainee, Karnataka





इस वक्त में है घन घोर प्रबल

इस वक्त में है घनघोर प्रबल, कुदरत के हैं कुछ अपने अदल। नासर का है वो जल निर्मल,न सरिता की धारा अवरिल।। नाहिम की है वो पूर्व धवल, नभ गगन तलाशें फिर उज्जवल।। मनु के लोचन ने विनय त्याग, तृश्णा का चिलमन ओढ़ा है।। करके अरण्य का सर्वनाश, अपना अस्तित्व खुरेदा है। इस वक्त की यही पुकार है, किया समय पे जीणेंद्धार है।। कि फिर हरे भरे हो सब निर्गल, और क्षितिज को चुमे खग मोनल।।

> शाश्वत द्विवेदी रो. नं. 33 एफ. आर. ओ. ट्रेनी, मध्य प्रदेश



SORRY STATE OF SPARROW

From waking up to the sparrow's twitter, We now snooze our alarms in a jitter! Remember when, you followed those butterflies and birds.

Now the only thing we follow is the virtual herds

You cut those trees and call it development, While the sparrows find their homes in abandonment No surprise, their numbers are in a state of decline, While we lay in a position of recline

In a pity state is the Delhi's State bird, So, let's listen to the sparrows' call unheard Because no wonder their numbers still dwindle It's high time to start a sparrow conservation struggle

So, let's reverse the sorry state of sparrow, And bring their chirps and hops back the show Plant some trees and provide them shelter, Just like our Vasudev kutumbakam culture!

> Archi Harit Roll No. 04 FRO Trainee, M.P.



अपना टाइम आ गया

हवा में महामारी, आकाश में टिड्डी उफनते तूफान और कॉपता पाताल, अरे ऑंखे खोलो देखो जरा क्या आ गया हम सबका काल ?

जिद थी इंसान कि, वो अनंत को पाना चाहता था विकास के इस आडंबर में वो जंगल काटना चाहता था और कैद किए थे उसने परिंदे खुद हवा में उड़ना चाहता था एक पल में घमंड टूटा है अब उसका जब घर में खुद हुआ हैं वो कैद और मुस्कुरा रही है धरती तोड़ कर मानव के भ्रम के भेद

करता रहा वो बेजुबानो पर जुल्म और मौज में वो कहता रहा, "अपना टाइम आएगा" इस पर प्रकृति हँस के बोली , रुक, ठहर, थम जा जरा Time तो आ ही गया हैं तेरा आ मैं दिखाऊँ तुझे तेरा future, क्यूँकि now, "It's time for nature"

तो अपना टाइम आ गया हैं फिर प्रकृति कि प्रकृति को समझने का और इंसान को इंसानियत सीखने का और लेने का ये प्रण कि सहेजेंगे इस धरती को हम क्यूँकि यही हैं हमारा असली धन #आर्ची





INTRODUCTORY TOUR: A LIFE TIME EXPERIENCE IN FTI & RC

That it was a fine shivering morning on 15thDecember, 2019 where all the Forest Range Officer (FRO) trainees including I were geared up at the front gate for the expedition for a week to wards the foothills of Himalayas whichis a sub-tropical forest. We are undergoing an eighteen months training at Forest Training Institute & Rangers' College (FTI & RC), Sundernagar in Mandi district of Himachal Pradesh. The eighteen months training course of FROs is prescribed by the Government of India which includes about 19 subjects related to Forestry, Biodiversity etc. It also includes 6months all India tour and Introductory Tour is a part of it.

We want to be recorded everything with in the frame whatever happening here with in the due course of time. We were about 40 in numbers from Chhattisgarh, Mizoram,

Madhya Pradesh, Karnata kaand Uttarakhand. Before leaving, we were group edinto two buses own by the Institute, one formale and the other for female trainee officers.

After a boutan hour of drive from our Institute, we reached at Swadaghat from where we trekked to Murari Devi Temple

which lies on the to pofa sacred hill called Murari Dhar also known as Sikandara Ri Dharin the west and later had teat Forest Rest House, Bairkot from where we trekked again about 10kms of jungle route before eaching 'Smriti Van' within Baldwara Rangeunder Leda Block. We took our lunch at Smriti Vanas we all were exhausted and felt our food stuffs including water our bottles, we had been carrying too heavy to carry. During our first day trekking, we were being accompanied by Dr KirupaSankar M, Director, FTI&RC; Mr Besari Ram Sharma, Instructor, FTI&RC and Mr Jeet Singh, Deputy FRO, FTI&RC. Along the tract amidst birds' chirpings and callings, we were elaborated about different flora and faunal species which ween countered, their uses and values, their techniques of plantationif planted species. We observed and learnt floral species like Ficus religiosa, Ficus roxburghii, Eucalyptus, Cedrusdeodara, Toona ciliate,

Pistaciaintegerrima, Zanthoxylumarmatum, Vitexnegundo, Bombaxceiba, Pinusroxburghii, Rhododendronarboretum, Prunuspadus, Berberisaristate, Myricaesculanta, etc and different techniques of extraction of timber and Non-Timber Forest Produce (NTFP) like resin, gums, fruits, tans, dyes, drugs, oilseeds, fibreetc. We had also seen birds like Himalayan Bulbul and Yellow Billed Blue Magpie before lunch.

We reached Rewalsar in the late evening where we nighthalted. Rewalsar also known as Tri Sangam is popular because of its adherents to three religions such as Buddhism, Hinduism and Sikhismandis situated in the southern Himalayan be lt in Mandi district. 'Rewalsar lake' is at our is tdestination and is situated in the middle of the town. Next morning, we visited Rewalsar Mini Zoo where

we were explained about Wildlife Protection Act, 1972 as a part of the subject. The zoo was established in 1983 as rescue centre of Himalayan Black Bear, Barking Deer, Sambar, Goral, Spotted Deerand Porcupine. We had interacted with the staffs and learnt about its management and conditions of the zoo. We

continued our day bound journey and observed flora species like Mallotusphilippensis, Callistemonlanceolate, Albiziachinensis, Fragriaindica, Agaveamericana, Partheniumhysterophorus, Murrayakoenigii, Carissacarandus, Debregesiahypoleuca, Punica grantum, Ipomea carnea, Greviaoptiva, Justiciaadhatoda, Woodfordiafruticose, Rosa moschata, Phoebelanceolate before reaching Naina Devi Temple where we spent two nights. The Naina Devi is situate donahill top in Bilaspur district of Himachal Pradesh. From Rewalsar, we were being accompanied by Smt Parool Sood, Deputy Director cum Course Coordinator, FTI&RC and Mr Besari Ram Sharma, Instructor, FTI&RC. In the next morning, we trekked for sever al hours and reached Kunt Byoh, Khadlasar, Bheema Cave, Guru Padmasambhava Cave and Sukhasar-alow landopen field where we played several

games and taught about management and the importance of



team works in the field.

Next day at Naina Devi Temple, we were joined by C.L.Joshi, Joint Director, FTI& RC for the day trekking to Dharampur where we had a night halt and were separated into two groups. Female trainee officers were accommodated at Forest Rest House whereas, male trainee officers were managed to local Hotel due to accommodation problem. Mr Besari Ram Sharma, Instructor, FTI&RCalsoaccompaniedus. During our long trekking we observed floral species like Pyruspashia, Grevilliarobusta, Bauhiniavariegate, Prinsepia utilis, Salixtetrasperma, Boenninghauseniaalbiflora, Ficuspalmata, Solanumindicum, Asparagusadscendens, Durantaerecta, etc. And bird species like Lophuraleucomelanos and Psittaculakrameria. Meanwhile, while taking rest in the middle of the jungle, C.L. Joshi had explained us about different types of forestas we keep on visiting them on eafter the other in the day. AsI could recalled them, we visited one at Durgapur Block, Sarkaghat Range within Suket Division. Healso explained us about 'timber extraction' and how they are being distributed on the way to Dharampur.

Following next morning, in fact the last day of our tour, we rushed to Dharampur Nursery with in Dharampur Range where various grades of plant saplings of Dalbergiasisoo, Acaciacatechu, Terminaliacebula, Terminaliabellarica, Emblicaofficinalis, Quercusleucotricophora, Sapindusmukorossi, Terminalia arjuna, Syzygiumcumini, Eriobotryajaponica were nurtured. Nursery is a managedareawhere plantingmaterials suchasseedlings,

saplings, cuttings, etc are raised, propagated and multiplied under favourable conditions. There, we had also learnt about various methods of preparation of 'Vermicompost' and its benefits.

On the way to 'Kamlah Fort' within Sikandardhar Range, we visited solar fencing on road side farms and learnt about its uses. Various floral species such as *Jatropacurcas*, *Phoenixsylvestris*, *Cassiafistula*, *Rumeshastatus*, *Tinosporacardiofolia*, *etc*. were observed during the journey. Kamlah Fortis situated on a hill top of about 4500 foot where we had also learnt about Khatari System. Khatari Systemis nothing but, a traditional way of water harvesting system prevalent in the ancient time.From Kamlah Fort, we went down to Kandapatan, ariver bed and a confluence of Beas, So anand Gamb arrivers where we had also learnt about Gabion Walls and their uses before visitingMiningand Stone Crusher where various grades of sands and stones are extracted. Later, in the evening were ached at FTI&RC, Sundernagar safely and successfully.

During the tour, we were anewandan alien to one another as we are to the fores that ically. This tour gave us an opportunity to mingle and know each other, and so did we. Thus, this tale of short trip will be etched in our lives and will remain a life time experience for all.

"And into the forest I go, to lose my mind and find my soul"~JohnMuir

Suman Chakma Roll No. 38 FRO Trainee, Mizoram











DIRECTOR SIR EXPALINING ABOUT HAMMER MARK ON SCANTLINGS



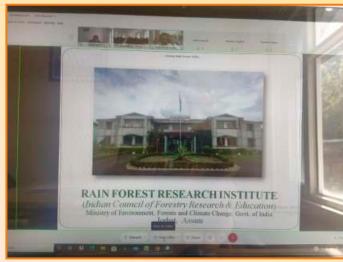
VISIT TO STONE CRUSHING FACTORY



VISIT TO DEODAR PLANTATION, SARKAGHAT



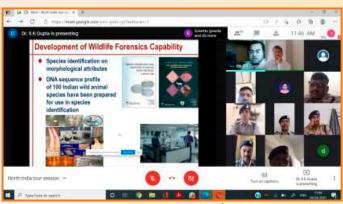




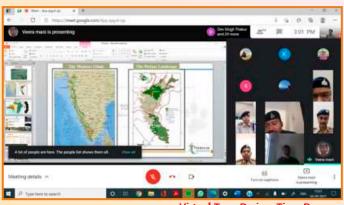
Virtual Tour, Assam



Virtual Tour, Karnataka



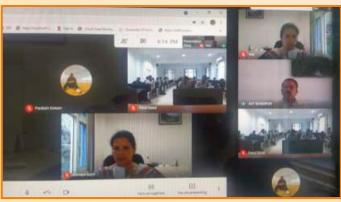
Virtual Tour, CASFOS Dehradun



Virtual Tour, Periyar Tiger Reserve



Virtual Tour, Mizoram



Virtual Tour, Bandipur



Virtual Tour, Goa

Online Hasses



Virtual Session on Medicinal Plants, Nauni University



Online Class on Eco-tourism



Forest Accounts Online Class



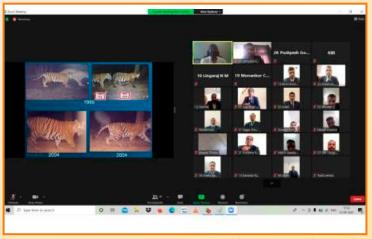
IIRS Virtual Session



Man Animal Conflict Online Session



Online Class by Parul Ma'am



Tiger census Online Session

SEEKING SOLACE IN THE WILDERNESS: A PERSPECTIVE ON COMMUNITY PARTICIPATION IN WILDLIFE AND FORESTRY CONSERVATION

"If the bee disappears from the surface of the earth, Man would have no more than four years to live."

Strong inter linkages between nature and mankind can be aptly understood by the above golden words of Albert Einstein. In times of the ongoing pandemic and the grave uncertainty associated with it, it becomes imperative for us to ponder upon over our role in nature. The present COVID-19 crisis has proven beyond doubt that man has still very little to offer against the vagaries of nature. It is not for the first time that a deadly virus has emerged out of wildlife exploitation and wreaked havoc in large parts of the world. India, being a mega diverse country, harbours a rich diversity of both flora and fauna. Apart from being threatened by the ever increasing population and habitat destruction, there is a wider threat from poaching and wildlife trafficking which cater to a global chain mainly centred around china and south east asia. Conservation and protection of wildlife was given teeth by the wild life protection act 1972, which accorded various degrees of protection to wildlife.

Balance between forestry and wildlife

While the recent debates have focussed on the vital issue of global warming and rising carbon dioxide in the atmosphere. Mitigation strategies like Afforestation and carbon sequestration have taken precedence over wildlife management. Apart from being associated with a provider of various services like ecosystem, soil conservation, timber etc forests are also vital as carbon sinks. Even within the wildlife, conservation of apexpredators like Tiger and Lion has gained prominence owing to their wider appeal in public. I fone has to argue about the monetary benefits of conserving wildlife, it can be easily stated that trillions of

dollars have been wasted world over and world economies razed to the ground due to a single virus emanating from wild animals (pangolins and bats). Wildlifeconservation and management thus can be overlooked at our own peril.

Community Participation

It is impossible for any state machinery to conserve and protect the wildlife without the cooperation of local inhabitants. Forest dwellers in our country have been living in harmony with nature over centuries. They are dependent on various forest goods and services. This situation underwent a dramatic change during the colonial period and state apathy in the initial years after independence created a complex web of problems. Role of state intensified in forest management relegating the status of forest dwellers to encroachers rather than stakeholders. The situation has improved drastically in the past two decades, but still a lot more can be achieved. In a large and diverse landscape like ours one size fits to all approach is bound to fall flat. Communities have different viewpoint approaches towards environment. Multitude o fbelief system and economic dependency also plays an important role. In such a scenario I would like to present three landscapes in three different states (Madhya Pradesh, Gujarat and Rajasthan) and based on field tour, will try to study the role of local community's impact in environmental conservation.

Kanha Tiger Reserve(Madhya Pradesh): A model of conservation and collaboration

One of the oldest and well managed national parks in the country; I was startled by the exquisite richness of fauna and flora in it. In addition to the Tiger it is the last surviving



abode of Barasingha. Baigas and Gonds are the two communities which live in villages in and around the buffer region of the reserve. They have traditionally protected the Tiger and have lived in harmony with the nature. One marked difference which was noticeable among the two tribes was that Gonds were comparatively better educated and well aware. This was observed in their higher representation in various ecotourism economic activities. But this doesn't mean Baigas were any less significant. As told by one forest staffer, Baiga tribes have played a critical role in spotting tigers in their natural habitat assisting the forest department. While protection of tigers has been a successful story in Kanha, there have been stray incidents of poaching of wild boar and sambhar for consumption by local tribes(mainly baigas). Kanha had one of the stringent protection and patrolling regimes which was evident from near absence of mobile communication signal inside the park. Still forest officials were apprehensive of poaching incidents. Baiga tribals can be further utilised for forest conservation by increasing education and their participation in ecotourism committees.

Gir National Park(Gujarat): Picture of Pride and Commitment

One thing which was noticeable during my visit to Gujarat was the common man's pride associated with any major achievement of their state. Whether it was industry, infrastructure, culture, cuisine, state icons etc. It was therefore no different that locals in Gir National Park took immense pride in their state being the last surviving abode of wild Asiatic Lions. Siddis and Maldharis are the prominent community residing within the fringes of the park. Unlike the Baigas, which used to be mostly hunter gatherers, these tribes practices ettled agriculture. The forest provides them an avenue for cattle grazing. This is where theirrelationship with Lions comes into picture. Lion here is considered 'devta' in local parlance and any attack on cattle is considered a tax on the forest which sustains them. Local vaishnavite influence and strong vegetarianism within the state has ensured that even poaching of herbivores is rare in the park. This commitment from the locals have ensured that *park* officials can devote their energy into various other conservation strategies.

Khejadli (Rajasthan): Story of Sacrifice and Veneration

In the semi-arid patches of Jodhpur in Rajasthan lies the village of khejadli. This landscape does not boast of flora and fauna which is associated with Kanha and Gir.The major fauna present in this landscape are Black bucks, Chinkaras, Blue bulls and desert foxes. Khejri (Prosopis cineraria) is the major tree species. What makes this place special among the annals of environmental conservation are the efforts of local Bishnoi community in protecting the environment. Bishno is follow a set of 29 principles given by Guru Jambeshwar in 15th century. Cutting of trees and killing of animals is prohibited for them. Strongest manifestation of this principle came in 1731 when 366 Bishnois laid down their lives protecting cutting of trees from local ruler. This deep-rooted veneration for environment has resulted in the area inhabited by Bishnois converting into a successful conservation reserve. Local climatic conditions have also played a part in protection of trees but the sacrifice endured by this community is unparalleled. As we have seen from the above examples community participation is crucial for any kind of conservation and protection strategy. Even in case of wild life trafficking general public can play an important role in identifying and reporting of incidents. Proper awareness campaigns about lesser known species like Pangolins can greatly help. Campaigns like 'Operation save kurma' and 'Operation clean art' for Turtles and Mongoose are fineexamples initiated by wildlife crime control bureau. It should be known to every single human soul that even the smallest creature has a role to play in maintaining the balance of Ecosystem.

> Shashvat Dwivedi Roll No. 33 FRO Trainee, M.P.

प्रकृति की सीख

सागर से सीखो, शांत रहना नदियों से सीखो, अपनी धुन में बहना सूरज से सीखो, तपते रहना हवा से सीखो, निरंतर चलते रहना

पर्वत से सीखो, अड़े रहना वृक्षों से सीखो, हर स्थिति में खड़े रहना तितलियों से सीखो, इठलाना भौरो से सीखो, गीत गाना पुष्प से सीखो, वातावरण महकाना काटो से सीखो, फूलो को बचाना पक्षियों से सीखो, तिनके जोड़ना आरुषि से सीखो, प्रेम का प्रकाश फैलाना

सारी प्रकृति हमे कुछ ना कुछ सिखाएगी, ना जाने मनुष्य को अकल कब आएगी, जिसने स्वार्थ पूर्ति में धरा को सताया, सीखो सीखो कह कर कुछना सीख पाया

> प्रतीक आर. बोपचे रो. नं. 24 एफ. आर. ओ. ट्रेनी, मध्य प्रदेश

मानव पर कहर किन्तु प्रकृति को फायदा

हमारी संपूर्ण आर्थिक समृद्धि छोटे सूक्ष्म जीवों द्वारा मिटा दी जा सकती है। कोराना वायरस महामारी ने स्पष्ट कर दिया है कि यह सामूहिक विकास और समृद्धि को परिभाषित करने का सही समय है, जो पारिस्थितिक सम्पन्तता के संदर्भ में मापी जा सके न कि बढ़ती आय के स्तर के रूप में। पिछले चार महिनों में हमारी दुनिया एकदम बदल गई है, हजारों लोगों की जान चली गई, लाखों लोग बीमार पड़े हुंए हैं, इन सब पर एक नए कोरोना वायरस का कहर टूटा है। ज्ञातव्य है कि पिछले दो दशकों में सार्स, इबोला, निपाह और अब कोरोना वायरस ने वैश्विक अर्थव्यवस्था और समाज को हिला दिया है। पकृति रिसेट बटन दबा रही है। वैश्विक अर्थव्यवस्थाएं भारी गिरावट की स्थिति में है। वायरस के प्रकोप का यह प्रकार और पैमाना हमारे जीवन काल में अपनी तरह का पहला है।

ये वायरस दिसंबर 2019 में चीन के वुहान शहर में पहली बार सामने आया था, उसके बाद से दुनिया में सब कुछ उलट-पुलट हो गया। शुरूआत वुहान से ही हुई, जहां पूरे शहर की तालाबदी कर दी गई। इटली में इतनी बड़ी तादाद में वायरस से लोग मरे कि वहां दूसर विश्व युद्ध के बाद से पहली बाद लोगों को आवाजाही व पर इतनी सख्त पाबंदी लगानी पड़ी। ब्रिटेन की राजधानी लंदन में पब, बार और थिएटर बंद है। लोग अपने घरों में बंद है। दुनिया भर में उड़ाने रद्द कर दी गई और बहुत से संबंध सोशल डिस्टेंसिंग के शिकार हो गए। फिलहाल अमेरिका में लाखों लोग इस बीमारी से मर गए जोकि अमेरिका के इतिहास की अपूर्णीय क्षति है। भारत में भी पूर्ण बंदी लागू की गई जो कि अब तक चार चरणों में चलाई जा रही है। सरकार ने जनता में जागकरूकता लाने हेतु सारे प्रयास किये हैं। यद्यपि कोरोना से सकमित मरीज दिन प्रतिदिन बढ़ रहे है। किन्तु आर्थिक चक्र को गति देने हेतु आवश्यक सेवाओं को शुरू करने के प्रयास किये जो रहे हैं। सामाजिक दूरी जो कि वास्तव में भौतिक दूरी होनी चाहिए कि धारणा संपूर्ण विश्व में पालन की जा रही है।भारतीय संस्कृति का नमस्कार अभिवादन सारे देशों द्वारा अपनाया जा रहा है। वास्तव में इस बीमारी से सर्वाधिक नुकसान केवल और केवल मानव प्रजाति को हुआ है। इसके विपरित प्रकृति में कई सारे सकारात्मक परिवर्तन देखने को मिले हैं जो कि <mark>जैव विविधता और</mark> प्राकृतिक संसाधनों के संरक्षण हेतु अत्यंत हर्ष करने वाले और उत्साहवर्धक हैं।

प्रदूषण में भारी कमी-

पाबंदियों के बीच चौकाने वाले परिवर्तन होने लगे हैं जैसे अगर, आप राजधानी दिल्ली से पड़ोसी शहरों नोएडा में पूरा मंजर बदला नजर आता है। सुबह की नींद अब अलार्म से नहीं, परिंदों के शोर से खुलती है। नीला आसमान, दिल्ली—एनसीआर में रहने वाले बहुत से लोगों ने जिंदगी में शायद पहली बार देखा हो। सड़कें वीरान तो हैं, मगर मंजर साफ हो गया है। सड़क किनारे लगे पौधे एकदम साफ और फूलों से गुलजार हो गए है। यमुना नदी तो इतनी साफ दिखाई दे रही है कि पूछिए मत। सरकार हजारों करोड़ो खर्च करके जो काम नहीं कर पाई लाकडाउन के महजदों से तीन महिनों ने वो कर दिखाया। धौलाधार की पहाड़ियां जालंधर और जम्मू से नजर आने लगी है।

प्रकृति के लिए वरदान?

इस नन्हें से वायरस ने हजारों लोगों को अपना निवाला बना लिया है। अमेरिका जैसी सुपर पावर की हालत खराब कर दी है। इन चुनौतियों के बीच एक बात सौ फीसदी सच है कि दुनिया को ये लॉकडाउन प्रकृति के लिए बहुत मुफीद साबित हुआ है। वातावरण धुलकर साफ हो चुका हैं। हालांकि ये तमाम कवायद कोरोना वायरस के संकमण को फैलने से रोकने के लिए हैं।

लॉकडाउन की वजह से तमाम फैक्ट्रियां बंद है। यातायात के तमाम साधन बंद हैं। अंतर्राष्ट्रीय स्तर पर अर्थव्यवस्था को भारी धक्का लग रहा है। लाखों लोग बेरोजगार हुए हैं। शेयर बाजार औंधे मुंह आ गिरा हैं लेकिन अच्छी बात यह है कि कार्बन उत्सर्जन रूक गया है। अमेरिका के न्यूयार्क शहर, चीन और यूरोप की ही बात करें तो पिछले साल की तुलना में इस साल वहां प्रदूषण कार्बन उत्सर्जन और नाइट्रोजन डाईऑक्साइड में अच्छी खासी कमी दर्ज की गई है। लॉकडाउन के बाद-

कुछ लोगों का कहना है कि इस महामारी को पर्यावरण में बदलाव के तौर पर नहीं देखा जाना चाहिए। अभी सब कुछ बंद है, तो कार्बन उत्सर्जन रूक गया है। लेकिन जब दुनिया फिर से पहले की तरह चलने लगी तो क्या ये कार्बन उत्सर्जन फिर से नहीं बढ़ेगा ? पर्यावरण में जो बदला व हम आज देख रहे हैं क्या वो हमेशा के लिए स्थिर हो जाएंगे।

वैज्ञानिकों के मुताबिक, दुनिया के कुलकार्बनउत्सर्जन का 23 फीसदी परिवहन से निकलताहै। इनमें भी निजी गाड़ियों और हवाई जहाज की वजह से दुनिया भर में 72 फीसदी कार्बन उत्सर्जन होता है। अभी लोग घरों में बंद हैं। ऑफिस का काम भी घर से कर रहे हैं। अपने परिवास और दोस्तों को वक्त दे पा रहे हैं। ऐसा माना जा रहा है कि मुश्किल की इस घड़ी में हो सकता है लोग इसकी अहमियत समझें और बेवजह गाड़ी लेकर घर से निकलने से बचें। ऐसा पहली बार नहीं है कि किसी महामारी के चलते कार्बन डाईऑक्साइड का स्तर कम हुआ हो। इतिहास में इसके कई उदाहरण मिलते है। यहां तक कि औद्योगिक कांति से पहले भी ये बदलाव देखा गया था। यूरोप में चौदहवीं सदी में आई ब्लैक डेथ हो या दक्षिण अमेरिका में फैली छोटी चेचक सभी महामारियों के बाद वातावरण में कार्बन डाईऑक्साइड का स्तर कम दर्ज किया गया था। उस दौर में परिवहन के साधन भी बहुत सीमित थे और जब महामारियों के चलते बहुत लोगों की मौत हो गई तो खेती की जमीन भी खाली हो गई और वहां जंगली पौधे और घास पैदा हो गये थे।

आज हम मेडिकल साइंस के लिहाज से भी काफी आगे बढ़ चुके है। लिहाजा उम्मीद यही है कि नए कोरोना वायरस से उतनी मौतें नहीं होंगी, जितनी पिछली सिदयों की महामारियों में हो चुकी है। इसीलिए पर्यावरण में बहुत बदलाव भी संभव नहीं है। ये बदलाव महज उतना ही होगा जितना कि 2008—09 की मंदी के दौरान देखा गया था। फैक्ट्रियां, तामीरी काम और निर्माण क्षेत्र से 18.4 फीसदी कार्बन उत्सर्जन होता है। 2008—09 की मंदी के दौरान ये उत्सर्जन 1.3 फीसदी था, जो 2010 में हालात ठीक होने के बाद बहुत तेजी से आगे बढ़ा था।

जिस तरह मौजूदा समय में जान बचाना लोगों की प्राथमिकता बना हुआ है वैसे ही लोगों को पर्यावरण के प्रति चिंतित कराया जाना जरूरी है। पर्यावरण कार्यकर्ता, ग्रेटा थनबर्गकी तरह इसे एक मिशन के तौर पर लिया जाए। ग्रेटा इस मुश्किल समय में भी डिजिटल प्लेट फार्म से अपना मिशन आगे बढ़ा रहीहै। पर्यावरण पर इसी साल नवंबर महिने में कॉप—26 की मिटिंग स्कॉटलैण्ड के ग्लासगो में होने वाली है। जिसमें दुनिया भर से 30 हजार प्रतिनिधि हिस्सा लेंगे।

पर्यावरण को बचाने के लिए लोगों को अपनी आदतें बदलनी होंगी। अगल वो खुद नहीं बदलते हैं, तो उन्हें जबरन बदलवाना पड़ेगा जैसा जापान के क्योटो शहर में हुआ था। साल 2001 में यहां मोटर वाले रास्ते बंद कर दिए गए और लोगों को सार्वजनिक परिवहन इस्तेमाल करने को मजबूर किया गया। धीरे—धीरे ये लोगों की आदत में शामिल हो गया। जब दोबारा रास्ते खुल तो भी ज्यादातर लोग सार्वजनिक परिवहन का ही इस्तेमाल कर रहे थे।लेकिन इसके लिए सरकारों को सार्वजनिक परिवहन की स्थिति बेहतर करनी होगी।

कोरोना वायरस की महामारी से हमारे शारीरिक और मानसिक स्वास्थ्य पर इसकाा बहुत नकारात्मक प्रभाव पड़ रहा है, ना जाने कितनों का रोजगार खत्म हुआ है। अर्थव्यवस्था पटरी पर कब लौटेगी ये भी कहना मुश्किल है।लेकिन इस महामारी ने एक बात साफ कर दी है कि मुश्किल घड़ी में सारी दुनिया एक साथ खड़ी होकर एक दूसरे का साथ देने के लिए तैयार है। तो फिर क्या यही जज्बा और इच्छा शक्ति हम पर्यावरण बचाने के लिए जाहिर नहीं कर सकते ? हमें उम्मीद है इस समय का अंधकार हम स्वच्छ और हरे—भरे वातावरण से मिटा देंगे।

शैलेन्द्र सोलंकी रो. नं. 32 एफ. आर. ओ. ट्रेनी, मध्य प्रदेश

हिमालय की गोद में ट्रेनिंग

सफलता लोगों के जीवन के लिए एक महत्वपूर्ण शब्द है। ये शब्द दूसरों के भांति मेरे जीवन के लिए भी महत्वपूर्ण है। जब मैं सफल हुआ और ट्रेनिंग के लिए लेटर आया, दोनोंही दिन मैं बराबर रूप से खुश था। ट्रेनिंग का जो पत्र मेरे पास आया उसमें मेरा ट्रेनिंग हिमालय की गोद मण्डी में होना था जो भारत में छोटा काशी के नाम से प्रसिद्ध है। यह मेरे मन को अत्यंत आनंदित करने वाला था।

मेरे ट्रेनिंग सेंटर से हिमालय की हसीन वादियां दिखती है। इन्हीं हसीन वादियों के बारे में मैने बहुत से फिल्मों में देखा था, बहुत से साहित्य में पढ़ा था। भारत के मुकुट के रूप में स्थापित हिमालय में जब सूर्य की प्रथम किरण पड़ती है तब हिमालय में जमे बर्फ हमें पुखराज की भांति दिखाई देते है। किसी गीतकार ने दिल्ली की सर्दी को लिखा है, लेकिन हिमाचल की सर्दी को गीत के रूप में ढाला जाये तो गीत जरूर सुपरहिट हो जायेगा। यहां की ठण्ड, कंपाने वाली सर्दी हमारे लिए अकल्पनीय है।

ट्रेनिंग में सबेरे पांच बजे उठना, वो भी शून्य से भी नीचे के तापमान में कठिन काम था।कभी—कभ सवेरे का ये शेड्यूल किसी सजा से कम नहीं लगता।अपने हिम्मत और दोस्तों के सहयोग से यह शेड्यूल भी थोड़े दिन में अच्छा लगने

लगा। धीरे—धीरे ट्रेनिंग का यह शेड्यूलभी जीवन का अभिन्न अंग बनने लगा। एक दिन मण्डी से लगभग 30 कि. मी. दूर रिवाल्सर झील ले जाया गया। यह झील रिवाल्सर नामक जगह में स्थित होने के कारण इसे रिवाल्सर झील कहा जाता है। इस झील में विभिन्न किस्मों की मछिलयां पाई जाती है। जब मछिलयों को मैं निहार रहा था तब मेरे मन में बहुत से प्रश्न घूम रह थे। इन्ही प्रश्नों में एक प्रश्नथा कि ये मछिलयां इतनी सुन्दर क्यों हैं। प्रकृति ने इतनी रंग—बिरंगी चीजों से हमें नवाजा है, इनकी रक्षा का भार कौन लेगा? इसी झील के किनारे बौद्ध, हिन्दू और इसाई धर्म के पवित्र मंदिर हैं जिसे अलग—अलग धर्म में अलग—अलग नाम से जाना जाताहैं। रिवाल्सर झील की अनुभूति को मैं आज भी अपने मन में सहेज कर रखा हूं।

रिवाल्सर झील भ्रमण के दूसरे दिन नैना देवी मंदिर के दर्शन के लिए जाना था। माता दुर्गा के विभिन्न नामों में एक नाम नैना देवी है। उंची खड़ी चढ़ाई करते हुए लगभग 11 कि.मी. की ट्रेकिंग के पश्चात् नैना देवी के दर्शन हुए। यह मेरा दोहरा अनुभव था। पहला नैना देवी का दर्शन, दूसरा ट्रेकिंग का अनुभव। ट्रेकिंग को धर्म से जोड़ना यह नया अनुभव था। धर्म से मन मजबूत होता है, तो ट्रेकिंग से तन मजबूत होता है।दोनों मिलकर अंततः शरीर को स्वस्थ बनाते है।

31 दिसंबर साल का अंतिम दिन अर्थात बूढ़े हो चुके बीते वर्श को विदाई और आने वाला शिशु नव वर्श का स्वागत का दिन होताहै। ट्रेनिंग में आने से पहले नव वर्श प्रवेश का उल्लास मित्र मण्डली एवं घरवालों के साथ मनाया करता था। ट्रेनिंग में नव वर्श का उल्लास मनाते वक्त घर वाले मित्र—यार याद आ रहे थेलेकिन जीवन मेंहमें आग बढ़ने के लिए कुछ चीजों को त्यागना पड़ता है। किसी किव ने कहा भी है— "कुछ फूलों के मुरझाने से बाग नहीं उजड़ा करते।" आज का नव वर्श प्रवेश उल्लास कुछ नया देखने सीखने की रात थी। हिमाचल संस्कृति के नृत्य को देख कर मेरा मन उल्साह से भर गया था। उनके कदमों की

ताल—लय में मेरा मन भी रम गयाथा। उनकी थिरकन और मेरी धड़कन के बीच एक संवाद स्थापित हो गया था।

कान्हा किसली भ्रमण भी मेरे जीवन में एक नया अनुभव लेकर आया। मैं छत्तीसगढ़ के बिलासपुर शहर में रहता हूं। वहां से कान्हा—िकसली मात्र 200 कि .मी. की दूरी पर स्थित है। मित्रगण अक्सर वहां जाते रहते हैं, मैं वहां के बारे में सुनता रहता था, मेरा भी जाने का कार्यक्रम एक—दो बार रदद हो चुका था। ईश्वर ने नये दोस्तों के साथ ही जाना लिखा था। कान्हा—िकसली बाघ के लिए प्रसिद्ध है। खिटया गेट से हम लोगों ने कान्हा किसली में प्रवेश किया। मन उत्साह भरा था। यह उत्साह बाघ देखने का था। मन में एक सवाल उत्पन्न हो रहा था कि क्या हम लोग बाघ के दर्शन कर पायेंगे। किन्तु मेरे सवालों के बीच हमारे गाइड ने कहा— ''वो देखा तलाब के पास बाघ है।'' मैं भी दूर से बाघ देखा, बाघ भी हमारी ओर देख रहा था। फिर बाघ तालाब के पीछे घास के मैदान में कहीं चला गया।

कान्हा किसली में बारहसिंगा भी देखने का अवसर प्राप्त हुआ। यहां की बोमा पद्धति द्वारा बारहसिंगा की शिफटिंग का कार्य किया जाता है। बोमापद्धति का प्रयोग अन्यराष्ट्रीय उद्यानों में भी किया जाता है।

म.प्र. का पन्ना राष्ट्रीय उद्यान भी बाघों के लिए प्रसिद्ध है। इस राष्ट्रीय उद्यान में पहले बाघ विलुप्त हो गये थे। किन्तु म.प्र. सरकार एवं वन विभाग के इच्छा शक्ति के परिणाम स्वरूप वहां बाघों को संरक्षित किया गया एवं उनकी संख्या को बढ़ाने के लिए प्रयास किये गये। इन प्रयासों के परिणाम स्वरूप वर्तमान में पन्ना राष्ट्रीय उद्यान में बाघों की संख्या 50 से अधिक हो गई है। गिद्ध हमेशा से ग्रामीण संस्कृति का अभिन्न हिस्सा रही है लेकिन वर्तमान में गिद्धों की संख्या में कमी आई है। पन्ना राष्ट्रीय उद्यान में गिद्धों को संरक्षित किया जा रहा है।

शैक्षणिक भ्रमण दौरे पर भोपाल का वन विहार, भीम बेटका, आईआईएम आदि से परिचित होने का सुअवसर प्राप्त हुआ। सभी जगह कुछ—न—कुछ नया था। अहमदाबाद में गुजराती संस्कृति से परिचित हुआ। गुजरात के पश्चात् हम लोग

राजस्थान के उदयपुर और जोधपुर गए। जोधपुर में विश्नोई समाज के लोगों का पर्यावरण के प्रतिप्रेम देखते ही बनता है। इतिहास पुरूश महाराणा प्राताप की जन्म स्थली कुंमलगढ़ के किले को भी देखने का सौभाग्य मुझे प्राप्त हुआ। इसके पश्चात् जैसलमेर गए, जो पाकिस्तान के बार्डर से लगा हुआ है। जैसलमेर के थार मरूस्थल में डेजर्ट नेशनल पार्क के ग्रेट इंडियन बस्टर्ड पक्षी का पहली बार देखा।

पूरे शैक्षणिक भ्रमण के दौरान हम लोगों ने भारत की प्राकृतिक वानस्पतिक, सांस्कृतिक, धार्मिक विभिन्नता के दर्शन किए और जाना जैसे मनुश्य के शरीर अलग—अलग होते हुए भी उसमें बसने वाली आत्मा एक है वैसी ही भारत भी एक हैं।

देव सिंह ठाकुर रो. नं. 07













जैव विविधता : आज के संदर्भ में

प्रकृति ने हमें जीवन की सबसे अमूल्य वस्तु को उपहार के रूपमें दिया है। इनमें प्रमुख तत्व है—मिट्टी, वायु और जल। इन तीनों के बगैर जीवन की संभावना ही नहीं है, नहीं इन तीनों का कोई विकल्प है। पृथ्वी की समस्त रत्न, आमूशण भी यदि लुटा दें तब भी इन को प्राप्त नहीं कर सकते। पहली बारिश के बाद मिट्टी से आने वाली सुगंध, पकते हुए अन्न से आने वाली खुशबू आज तक नहीं बदली है। यदि कुछ बदला है तो मनुश्य की मनोवृत्ति। मनुश्य का केन्द्र बिन्दु 'धन' हो गया है। वह प्रकृति से कोसो दूर हो गया है।

धरती मां दुल्हन सी सजी संवरी हरी—भरी अपने सभी बच्चों को चाहे वह मनुश्य हो पशु हो, पक्षी हो, सभी जीव को समान रूप से प्रेम करती है। सबको समान रूप से अपने गोद में खिलाती है, पालती—पोशती है। लेकिन मानव ने सभ्यता के विकास के नाम पर प्रकृति पर प्रहार करना आरंभ किया। मां के आंखों से अश्रु बहने लगे। धरती मां ने प्रकृति के रूप में अपना गुस्सा दिखाया ता' कोरोना' के रूप में सम्पूर्ण विश्व में हाहाकार मच गया। सम्पूर्ण विश्व भी इसका हल निकाल ने में मई 2020 तक असफलहै। रतन टाटा जैसे दिग्गजों ने इस वर्श को'' जीवन बचाने का वर्श'' घोशित किया है। औद्योगिक व्यवस्था का आधार ही प्रकृति का विनाश है। कोरोना की वजह से उद्योग धन्धे, वाहन बंद है। मनुश्य अपने घर के अन्दर बैठे हैं तो पर्यावरण, नदी—नाले स्वच्छ हो गये हैं। गंगा, यमुना जैसी नदियों को साफ करने के लिए प्राधिकरण बनाये गये, लाखो—करोड़ो खर्च किया गया, फिर भी स्वच्छ नहीं हुई। आज लाकडाउन में गंगा—यमुना जैसी नदियों का स्वच्छ जल मुस्कुराती हुई कल कल—छल छल की आवाज के साथ बहने लगी है।

बड़े—बड़े शहरों और महानगरों की हवा भी जहरीली होती जा रही है। वहां की हवा में सांस लेना भी कितन हो रहा है। बिना मास्क के बाहर निकलना ही मुश्किल हो गया है। इसलिए बड़े—बड़े नगरों में आक्सीजोन की परिकल्पना की गई है। इस जोन में शुद्ध आक्सीजन के लिए पैसे देने पड़ेंगे। यह आक्सीजन का व्यवसायीकरण है।जो संपूर्ण मानव व समुदाय के लिए खतरे की घंटी है। पानी का व्यवसायीकरण तो पहले ही हो चुका है, अब बोतलों में पानी बिकने लगा है। घर में आने वाले पानी का पैसा नगर—िनगम, नगरपालिकाया पंचायतों में देना पड़ता है। धीरे—धीरे हमारे जीवन की सभी बहुमूल्य वस्तुओं का व्यवसायीकरण हो रहा है और हम सो रहे हैं, कुंभकरणीय निद्रा से हमें जागना होगा।

भारतीय संस्कृति को वन संस्कृति कहना अनुचित न होगा। भारतीय संस्कृति प्रारंभ से ही प्रकृति प्रेमी संस्कृति रही है। इसिलए सिंधु घाटी सभ्यता में पशु—पिक्षयों की पूजा की जाती थी। वैदिक युग में भी गाय, बैलों के साथ—ही—साथ वायु, अग्नि आदि की पूजा कीजानेलगी। वर्तमान में वनवासी संस्कृति में पशु—पिक्षयों की पूजा की जाती है। नाग पंचमी में नाग सांप की पूजा, पोला त्यौहार में बैलों की पूजा, दीपावली के दूसरे दिन गायों की पूजा, वट सावित्री के दिन वट एंव पीपल की पूजा, अनेक पौधों, वृक्षों को ईश्वर के प्रतीक के रूप में पूजा जाता है जैसे पीपल को शिन, बेल को सूर्य, केला को गुरू आदि नवग्रहों के रूप में अलग—अलग वृक्षों की पूजा आदि के पीछे का उद्देश्य ही सभी जीव से प्रेम, सभी जीव का संरक्षण ही रहा है। मानव कितना भी तार्किक हो जाये लेकिन उसका यह सोचना कि मानव समुदाय ही पृथ्वी पर राज करेगा, यह गलत है। पृथ्वी पर मनुश्य प्रजाति के अस्तित्व के लिए अन्य प्रजातियों का अस्तित्व भी आवश्यक है।

घर के आंगन में तुलसी का पौधा लगाना हिन्दू धर्म में शुभ माना जाता है। पीपल पेड़ में विश्णु जी का वास, बेल—पत्र शिवजी पर चढ़ते हैं, वट वृक्ष में ब्रम्हा, विश्णु, महेश का वास माना जाता है, आंवला नवमी को पेड़ की पूजा होती है। पेड़—पौधों की सुरक्षा के लिए पेड़—पौधों को ही धर्म से जोड़ा गया है। धर्म की नयी व्याख्या का समय आ गया है अब जो प्रकृति, पशु—पक्षी के प्रति प्रेम भावना रखते हैं इन को नुकसान नहीं पहुंचाते हैं उसे धार्मिक कहा जाना चाहिए। प्रकृति संरक्षण को सबसे बड़ा मानवीय मूल्य घोशित करना चाहिए।

जैव विविधता अर्थात् जीवन की विविधता। जीव जगत में पाये जाने वाले जीव—जन्तु, पादप और सूक्ष्म से सूक्ष्मत जीवों के मध्य अनुवांशिक, जातिगत और पारिस्थितिक स्तर पर पाई जाने वाली विविधता से है। विविधता का विस्तार मिट्टी में उपस्थित सूक्ष्म से सूक्ष्मतर एवं विशालकाय प्राणी जैसे—लाइकेन से ले

कर हाथी तक प्लेंक्टन से लेकर भीमकाय व्हेल तक पाया जाता है। जैव विविधता का इतिहास अरबों वशों का इतिहास है। पर्यावरणीय क्षति की वजह से जैव विविधता की भी क्षति हुई है। जीवों की बहुत से संकट ग्रस्त प्रजाति मानव की ओर निहार रही है। वे इंसान को ईश्वर की संतान मान कर अपने बचाव के लिए प्रार्थना कर रहे है।

बचपन में जुगनुओं को मुट्ठी से पकड़ने का प्रयास करते थे, तितिलयों को देखकर उछल—उछल कर दोनों हाथों से ताली बजाते थे। गौरैया चिड़ियों के लए कुछ अनाज के दाने पीने का पानी आंगनमें रखते थे। जब हमने पुस्तकों में पढ़ा तब जाना कि जुगनू से निकलने वाला प्रका शल्यूसिफेरस नामक प्रोटीन से निकलता है, तितिलयों की लगभग चौदह हजार से अधिक प्रजाति हैं, गौरैया चिड़िया की छः प्रजातियां होती हैं। जैसे ही हमने किताबों में पढ़ा तर्क—वितर्क किया हमारे भाव समाप्त हो गये। अब जुगनू, तितली, गौरैया के प्रति हमारे मन में आकर्शण न रहा, क्योंकि वह भाव का नहीं केवल तर्क का विशय रह गया है।

"रेड डाटा बुक" वन्य जीवों के संरक्षण के लिए काम करने वाली अंतर्राष्ट्रीय संस्था आई. यू.सी.एन. द्वारा तैयार की गई है। जिसमें विश्व की सभी विलुप्त होती प्रजातियों को सम्मिलित किया गयाहै। रेड डाटा बुक में प्रजातियों की संख्या में वृद्धि हो रही है जो एक चिंताजनक बात है। भारत के गिद्ध प्रजाति, बाघ, शेर, सफेद तेन्दुआ, जंगली भैंसा आदि पशु—पक्षियों को इसमें सम्मिलित किया गया है। डचिग्राम राष्ट्रीय उद्यान में पाया जाने वाला हंगुल विश्व में कहीं नहीं पाया जाता। खाकी सिंग का यह जानवर इस के दोनों सिंग के पांच काटे वाले उपसिंग होते हैं, ये बड़ा मनमोहक जानवर है। यह भी रेड डाटा बुक में सम्मिलित है।

संकटग्रस्त वनस्पितयों एवं जन्तुओं को बचाने के लिए उनके प्राकृतिक आवास के समान ही कृत्रिम आवास बना कर सुरक्षित रूप से वहां स्थानांतरित किया जाता है। तेजी से नश्ट होते प्राकृतिक आवासों के कारण संकट ग्रस्त वन्य प्राणियों के संवर्द्धन हेतु बर्हिस्थाने संरक्षण कारगर उपाय सिद्ध हो रहा है। इसमें वनस्पित उद्यान, एक्वेरियम, चिड़ियाघर, परागकण, जीन, डी.एन.ए. बैंक की स्थापना की जाती है। संरक्षण हेतु लाए गए प्राणियों के विचरण के लिए पर्याप्त स्थान, सहचर्य हेतु आवश्यक प्राणी या वनस्पित के प्राकृतिक आवास के समान तापमान, प्रकाश तथा भोजन की आपूर्ति का ध्यान रखा जाता है।

विलुप्त होती जीव—जन्तु, पेड़—पौधों के संरक्षण के लिए सरकार बहुत से प्रयास कर रही है जैसे—बाघ परियोजना, सिंह परियोजना, मगरमच्छ परियोजना, गैण्डा परियोजना, हाथी परियोजना, हिम तेन्दुआ परियोजना आदि। इन प्रयासों के बावजूद भी इनके संरक्षण में हमें शत—प्रतिशत सफलता के लिए जन सहयोगकी आवश्यकता है। जागरूकता से ही वन और वन्य जीव सुरक्षित रह सकते हैं।

किसी कवि ने ठीक ही लिखा है-(नरेश अग्रवाल)

में गुजर रहा था अपने चिर परिचित मैदान से एका एक चीख सुनी जो मेरे प्रिय पेड़ की थी कुछ लोग खड़े थे बड़ी—बड़ी कुल्हाड़ियां लिये वे काट चुके थे इस के हाथ अब पांव भी काटने वाले थे हम लोग लाश उठा रहे हैं अंतिम संस्कार भी कर देंगे तुम राख ले जाना।

> देव सिंह ठाकुर रो. नं. ०७ एफ. आर. ओ. ट्रेनी, छत्तीसगढ

Wildlife Week Celebration Photography Competition















BEAUTY IN THE FLAME (Flame of the forest): From history to mystery

The Sanskrit word Kimsuka means 'Like a parrot' or 'what brightness'. Palasha means both leafy and beauty in Sanskrit. The older name of the tree, parna, means leaf. Butea is also known as the flame of the forest, a well-known tree in India.

Mythological and Religious Associations

The wood is used in rituals and is frequently mentioned in the Vedas.

Its trifoliate leaves represent the Hindu triad, with Brahma on the left, Vishnu in the middle, and shiva on the right. Its leaves are symbolic of the Hindu Trinity- The creator, the Preserver and the Destroyer, the red flowers of the tree are affected to the gods.

In the **Rig Veda** this tree is mentioned in the wedding hymn, and the bridal car is said to be adorned with its flowers.

The Ramayana refers variously to a mountain tree, beautiful with its garlands of flowers blooming at the end of winter; it is a charming tree of Panchavati forest; table lands and mountains are made beautiful with these trees in flowers at springs around Pampa Lake; they are in such abundance with flowers as to touch the ground with their sheer weight; the dry and fierce lustre (of the flame) is like a crest of Kimshuka flowers; they resemble each other like the red flowered and large trees (of kimshukla and Salmali).

In the **Mahabharata**, the sage Jamadagni performs a ritual to the gods in palashavana (palasha grove), and the ceremony is attended by all the rivers. The tree in full bloom looks like fire on the horizon.

The **Buddhists** also revere it. Queen Mahamaya seized a branch of the palasha tree at the very moment of the birth of her son Gautama Buddha. The flower contains the orangered colour used to dye the robes of Buddhist monks. Wearing this colour means that they have burnt all their desires. It is often depicted in the Buddhist Jataka stories.

In Kalidasa's Kumarasambhava, the flame of the forest is among India's most venerated trees. Indeed, in ceremonies which honour other trees or which inaugurate

the planting of trees, twigs of the flame of the forest are rubbed together to ignite a sacred flame.

A log of this sacred wood is used to light a Hindu's funeral pyre.

It was a common custom in ancient India to touch cows with a palasha staff to separate them from their calves. It may be compared with the English rowan tree, which is used by the cowherds of Scotland to ward off evil spirits that try to enter the cowshed. In Germany, it is believed that cows beaten with a stick of the flame of the Forest yield more milk.

The tree is associated with the moon and is believed to be immortal, having sprung from the feathers of a falcon intoxicated with soma, the drink of the gods

It is also associated with Brahma, as he was converted into a palasha tree after being cursed by Parvati (Padma Purana, Uttara kanda). According to the Kurma Purana, it is a prohibited item of food for eating which Prajapati is prescribed an expiation

According to the **Vayu Purana** the palasha is found in champaka forests.

During the thread ceremony of a Brahman boy, he must hold a staff of palasha wood; the sacred utensils are also made of this wood.

The wood is used in ceremonies connected with the birth of Krishna and the digging of tanks.

The tree is considered sacred partly on account of its use in producing the sacred fire and partly because of its orange flowers, which are used to dye the coloured dust that is thrown during the Holi festival. According to an ancient ritual, the sacrificial post was to be made out of the wood of the khadira, the bilva, or the palasha. Dry twigs of the plant are used to feed the sacred fire. It is considered sacred to burn a dead body with palasha wood. The sacrificial post is prepared out of this wood. Its wood is used to produce the sacrificial fire by rubbing two sticks together.

It is employed in Hindu ceremonies to bless calves to ensure that they become good milk producers.



A popular belief is that if the root of a palasha tree is collected when the Ashvini constellation rules the sharadritu (autumn season; mid-September to mid-October) and tied to a man's arm, any woman he touches will fall in love with him.

Another story about this tree refers to a time when Indra felt very thirsty. The gods asked the goddess Gayatri to go to the celestial Mountain Mujavant where the soma creeper grew and bring it back, so that Indra would then have an uninterrupted supply of soma. Gayatri disguised herself as an eagle. She flew to the mountain and found it guarded by the sentries of the Moon. She swooped down, seized the creeper in her beak and, before the startled sentries could do anything, she flew away, screeching triumphantly. One of the sentries, Krishanu, let fly an arrow at the bird. The arrow

missed Gayatri but struck the vine. One of the leaves fell off and it fell to earth and grew into the palasha tree.

In another story, a king sent out his four sons to look for this particular tree and asked each to describe it on their return. Each son gave a completely different description because he had seen it in a different season. The palasha. too, has several appearances or moods and each one is striking for its unique beauty.

The orange-red flower of this tree is offered to Goddess Kali. Palasha is a dwelling place of Gandharans and apsaras. it is sacred to the Hosts of the Heavens, such as Soma or Chandra.

Jyoti G Menasinkai Roll no- 11 FRO Trainee, Karnataka

मानव के कैद से मुक्त हुई प्रकृति

पिछले एक साल से भी अधिक समय हो गया हमारी दुनिया बदल सीगई है। इनका कारण एक वायरस है जो दिसंबर 2019 में चीन के वुहान शहर म पहली बार सामने आया। उसके बाद से दुनिया में सब कुछ उलट—पुलट हो गया। जिसने विश्व के तमाम देशों के साथ—साथ अमेरिका जैसी सुपर पावर की हालत खराब कर दी है। हर देशमें लाखों लोग बीमार पड़े हुए है और हजारों लोगों की जाने भी जा रही है। लोग इस वायरस के प्रकोप से बचे हुए है। उनका रहन—सहन भी एका एक पूरी तरह से बदल गया है। इस वायरस से बचने के लिए कई देशों में अलग—अलग तरह से लाकडाउन लगाए जा रहे है और इस विपदा से बचने का भरसक प्रयास किया जा रहा है।

अब प्रश्न यह उठता है कि हम मानव पृथ्वी पर मौजूदा सभी जीवों से श्रेश्ठ हैं ? विकास के चरम पर हैं ? और विकास की यह गति अभी अनवरत जारी है। आज हमारी जल, थल, आकाश, चन्द्रमा, मंगल तक पहुंच हो गई है। इन सब के बीच अब प्रश्न उठता है कि कैसे इस नन्हें से वायरस ने मनुश्य के अस्तित्व पर प्रहार किया है। क्या हमने अपने आसपास के जीव-जन्तुओं, उनके रहवास तथा उनके अस्तित्व पर विकास के नाम पर बुरा व्यवहार किया है ? परिणामतः, लाकडाउन होते ही पूरे विश्व में प्रकृति तथा उसके पर्यावरण मे अचानक सकारात्मक परिवर्तन दिखाई देने लगा है। इतना ही नहीं स्वच्छता का आलम हर कहीं दिखने लगा है, हर जगह नीला आसमान दिखने लगा है, बाग-बगीचे सुन्दर हो गये है, पक्षियों के मधुर स्वर भी लौट आये है, पूरे पृथ्वी में कहीं भी शोरगुल नहीं सुनाई दे रहा है, हिमालय की चोटियां बर्फ से लदी हुई है और इतनी चमक बिखेर रहे हैं कि सूर्य की रोशनी आंखों को चौंधिया देती है। इससे यह लगता है कि हम सिर्फ सिक्के के एक पहलू के आधार पर कोरोना को महामारी मान रहे हैं परन्तु अगर दूसरे पहलू को देखा जाये तो यह पारिस्थितिकी तंत्र, प्रकृति एवं पर्यावरण के लिए तो वरदान सिद्ध हो रहा है। पूरी दूनिया जिस पर्यावरण और पारिस्थितिकी तंत्र की रक्षा और चिंता की खातिर बड़ी-बड़ी संगोश्ठिया और कार्य-योजनाएं बनाती रही है, वैश्विक चिंतन होता रहा है, अरबों रूपये भी खर्च हो चुके है, फिर भी कोई खास परिणाम नहीं निकला। वहीं यह काम एक छोटे से वायरस की बदौलत हुए विश्वव्यापी लाकडाउन ने कर दिखाया। विश्व के कई देशों के कई हिस्सों में ऐसे नजारे देखने को मिले हैं जहां वन्य जीव सड़कों पर निकल आये हैं, वहीं भारत में हाल ही में केरल की सड़क पर एक कस्त्री बिलाव नजर आया। उच्च हिमालय क्षेत्र का पक्षी मोनाल इन दिनों निचले क्षेत्रों में स्वच्छन्द उड़ता नजर आ रहा है। दुर्लभ हो रही यह नैसर्गिकता लाकडाउन के कारण मनुश्य की आजादी छिनने के बाद ही संभव हो पाई है।

इस अविध में गंगा हरिद्वार से लेकर हुगली तक निर्मल होने लगी, नैनीताल झील की पारदर्शिता तीन गुनी बढ़ गई, वही जालंधर के लोगों को पहली बार 213 किलोमीटर दूर धौलाधार की बर्फीली पहाड़ियां नजर आने लगी है। उत्तर भारत का वायु प्रदुशण पिछले 20 वर्शों की तुलना में सबसे निचले स्तर पर पहुंच गया है। जिससे आसमान में दृश्यता बढ़ गई है और आकाश नीला दिखने लगा है क्योंकि प्रदुशण की वजह से ओजोन परत का संतुलन बिगड़ गया था उस में अब सुधार हो रहा है इन सब के साथ गंगा आज स्वच्छ और निर्मल होती दिख रही है। जिस स्वच्छता और निर्मलता के लिए सरकारों ने करोड़ो रूपये खर्च किये और कोई परिणाम भी नहीं ला पाये। यह परिणाम लाकडाउन के फल स्वरूप दिखाई दिया। गंगा डाल्फिन और अन्य जीव पानी में दिखाई देने लगे हैं इन सब को देखकर ऐसा लग रहा है जैसे "मानव के कैद से मुक्त हुई प्रकृति" तभी तो फलक पर उड़ते हुए सफेद रूई जैसे बादल दिखाई दे रहे है। सड़के विरान तो है पर सड़क किनारे गुल मोहर दिख रहे है, आमफूल—फल से लदे मुस्कुरा रहे है।

कोरोना महामारी के इस महा संकट के दौर में जहां दुनिया में हाहाकार मचा हुआ है वहीं एक दुनिया ऐसी भी है जो कि खिलखिला रही है, मुस्कुरा रही है, स्वयं को मुक्त मान कर उड़ रहीहै। वह दुनिया कहीं और नहीं बल्कि इसी पृथ्वी पर है जिसमें मनुश्यों की केवल एक प्रजाति के सिवा अन्य जीव—जन्तुओं और पादपों की लाखों प्रजातियां जैसे आजादी का अनुभव कर रही है। इंसानों के घरों में कैद होने से धरती की नैसर्गिकता मुक्त हो रही है।मानव किया कलापों पर बंदिश, जीव—संसार को मिली आजादी और प्रकृति के पुनः मुस्कुराने का संदेश, इनसभी से स्पश्टहै कि इंसान अपनी सीमाओं में रहे अन्यथा एक दिन डायनासोर की तरह मनुश्य भी प्रागैतिहासिक काल का विशय मात्र रह जायेगा।

तोषी वर्मा रो. नं. 40 एफ. आर. ओ. ट्रेनी, छत्तीसगढ़







World Forestry Day Celebrations 2021









More variety better society







BD-2020 Virtual Celebrations

सफरनामा

देखा है सब ने इंन्द्रधनुष, पर कभी गिने हैं क्रमशः उसके रंग बैगनी, जामुनी, नीला, हरा, पीला, नारंगी, लाल लिए हुए अपने संग। लेकिन कभी किया है क्या तुम ने यह एहसास, कि ठीक—ठाक मध्यमें होता है यह हरा रंग सबसे खास।

हरा जो बच्चों के लिए तोता, महिलाओं हेतु निखार, धर्म हेतु मजहब तो वनरक्षक हेतु संसार। हां वनरक्षक एक संसार जहां हरा है हमारा धर्म, हरे पर हो गए किंतने कुर्बान क्योंकि यही है हमारा कर्म। घने जंगल, बेजुबान जानवर, कच्चे रास्ते हाथ में बस लिए हुए लाठी, अंधेरे में निकल जाती हैं ये गुमनाम खाकी।।

2 दिसंबर 2019 को इसी सफर का हुआ था आगाज, मध्यप्रदेश, कर्नाटक, छतीसगढ़, मिजोरम और उत्तराखंड के साथ। देवभूमि हिमाचल के देखने लगे थे सब सपने, रंग, रूप, भाषा, कद, काठी अलग लेकिन बनने लगे थे सबअपने।

भोर की कसरत, घाम का काम, सांझ का मनोरंजनऔरफिर विश्राम। उत्साह और बढ़ा जब सुना कि घुमाए जाएंगे हम को अब तीन धाम। मध्यप्रदेश, गुजरातऔर राजस्थान के सभी शहर जिनके सिर्फ सुनते आए थे अब तक नाम।

हृदय प्रदेश मध्य प्रदेश जहां की हर बात निराली है, सुना है यहां सर्वाधिक बाघों की आबादी है। गए थे कान्हा औरपन्ना सजा के बड़े सपने नहीं मिले बाघना ही उनकी छवि सब टूट गए थे अपने। फिर भी कान्हा का मैनेजमेंट, पन्ना का रीप्रोडक्शन देखकर जोड़ ली थी सबने आस, और फिर देखा भोपाल, उज्जैन, सांची, भीमबेट का, खजुराहो, सब खासमखास।



वाइब्रेंट गुजरात में राज पीपला फिर राम पारा की हुई तैयारी, और सरदार पटेल की वो प्यारी प्रतिमा सबने बारी—बारी से निहारी। अगले दिन देखा जैसे उतरा हो समुद्र धरती की गोद में, वो सोमनाथ तो 17 बार उठ खड़ा हुआ था धरती के उस छोर में। कर दर्शन, गए मरीन नेशनल पार्क, सीखा हर एक शब्द देखा हर एक तथ्य जो कभी न लगता था यथार्थ।

अब बारी आई बब्बर शेर की, वहीं जंगल का राजा उस दिलेर की, देख कर कर उस के ठाठ, फिर सीख के गिर फाउंडेशन के पाठ, हुए हम सब ज्ञानी, फिर गए देखने डायनासोर पार्क वो अतीत के बलवानी।।

सीमांत प्रहरी राजस्थान का शुरू हुआ अध्याय, उदयपुर, जोधपुर, जैसलमेर, बीकानेर और जयपुर सभी के मन को भाए। खेजरी, काफरी, आफरी फैंमिलियल फॉरेस्ट्री जहां एक ओर साजे हैं, वहीं सम की यादें, किले की कहानी हम सबकी यादें में ताजे हैं।

आज सब याद आता है इस फुर्सत के पल में, क्योंकि हमने देखा है सीखा है, समझा हैं उस हरे रंग का मतलब, तिरंगे के उस हरे रंग में। #श्रेयांश

श्रेयांश कुमार जैन रो. नं. 35 एफ. आर. ओ. ट्रेनी, मध्य प्रदेश

मैं मानव सबसे अच्छा

मैं मानव सबसे अच्छा, सारा हक मेरा, इस सृष्टि पर। यह नदिया मेरी, पानी मेरा ये वायु मेरी, बादल मेरा इस जगती तल के सारे कोने, है सारा अम्बर मेरा। सारी जीवित रचना इस सृष्टि की, उनकी मृत्यु मेरी जीवन मेरा, क्योंकि मैं मानव सबसे अच्छा! सारा हक मेरा इस सृष्टि पर।।

अहंकार है मेरा फैला धरती से नम के कोने तक, मेरी मर्जी चलती है सृष्टि के हर कोने तक। सारा उपभोग मेरा, मेरे लिए तेरा कुछ भी नहीं, सारी प्यास मेरी, मेरे लिए तेरे लिए कतरा भी नहीं क्योंकि मैं मानव सबसे अच्छा! सारा हक मेरा इस सृष्टि पर।। मैं, मेरा करते—करते सदियां बीती, शोषण करते करते सृष्टि की सारी रचना रीती, नहीं रहा अब खुला आसमा, नदियों में अब जहर घुला, आग उगलती बड़ी चिमनीयाँ, अंबर में दूषण फैला।

कट गए सारे प्यारे जंगल कारखाने उग आए हैं मूक जानवरों के स्थान पर वाचाल मनुष्य बसाएँ हैं। क्योंकि मैं मानव सबसे अच्छा, सारा हक मेरा इस सृष्टि पर

कुपित हो गया अब सूरज भी, गर्मी की वृद्धि का डर छाया है, नित नए पनपते विषाणुओं से, जीवन पर मृत्यु का साया है पहले विकास की होड़ मची थी, अब सतत विकास का नारा है। आने वालीन स्लोंको, अब क्या मिलनेवालाहै यह मानव सबसे अच्छा, यह अहंकार ना चल पाएगा केवल मानव की दृष्टि से, मानव भी ना बच पाएगा।।

> शुभी जैन रो. नं. 37 एफ. आर. ओ. ट्रेनी, मध्य प्रदेश

LOCKDOWN 1.0 - 3.0 MEMORIES (SUNDERNAGAR CHAPTER)

We all know that for first time in the history of mankind we had high level of restrictions in a democratic nation because of COVID 19 which gave many people different experiences.

We luckily belong to affluent families who faced no much problem in this grievous situation. Actually, we were



the luckiest ones too. Thanks to our previous Director Dr Kirupa Sankar that we some people got permission to stay back in Sundernagar during Lockdown until the flights were resumed. We had best time with so many memories, which will stay forever in our hearts. For me it became as joint family. Love was all there. That emotions are inexpressible. As the saying goes "No road is long with good company", 75 beautiful days were over in a flash.

As we had no classes, we had ample of time to pursue our hobbies. We had issued the binoculars from the institute. Daily morning, we used to go to Karen road to see trees, birds and butterflies. It was exciting thing for us to see a new bird, to identify it and to see them until they become common for u. After breakfast we would go to watch some more butterflies as they are active till noon. We used to play TT, carom in noon time and evenings we used to play volley ball and cricket. We even had carom league. We celebrated Ugadi festival. We all together cooked our South Indian dishes for the festival. Cooking together and eating together is just a bliss. Regularly there would be one special dish prepared by each of us. We even had prepared puri in our mess and ate panipuri. In the afternoon we used to play movies in common hall. We used to watch movies of different languages and watch wildlife documentaries too. We saw moon rise from Karen road mountains. So many small things we did which brought new dimension in my life.

One interesting story in this time was of the LEOPARD CALL. we had trekked to Trambadi forest for many times before. We went there regularly to see sunrise and sunset

from the Trambadi peak. Until one morning 5.30 am when we heard the call of Leopard from Trambadi forest. That day we were worried as to why the leopard was calling continuously. We thought that it was injured or was in danger. Then we called director sir and told him about the leopard call.

He came to hostel and then we went on top of administrative block and Sir analysed the call and said that leopard was not in any danger and it was its common behaviour. Later 10AM Sir said that we can go inside Trambadi forest and look for leopard. We all went along with Rajesh Sir and lady forest guards. As we went inside, we didn't hear any call from leopard. SoDirector Sir was teaching other aspects of forestry. We were sitting near a loose boulder check dam and sir was explaining about it, and suddenly we heard the call of leopard. From its call we understood that it was around 100m far from us. it was so unexpected that I got a shock and stood up automatically. Sir told that we can go near the place we heard the call coming. Director went ahead. we some trainees were behind. Only he could see the leopard tail. That call echoed in our minds later too. After this exciting trek, we came back.

As all good things come to end, these things too came to end. We finally had to decide to give up on our hope of resumption of training and went back to our respective homes. Before that day, we were given lunch party by our beloved teachers.

Thanks to lockdown that we made memorable memories here in Sundernagar. It's the company which matters the most. I'm just so grateful that I had wonderful friends who made this time very memorable.

Sneha KambliRoll no-36
FRO Trainee, Karnataka



"ALL WE SAW IS A TAIL, BUT A WORTHY ONE"

It was 5.30 am in the morning, I was sleeping and my roommate went for jogging and after few minutes he came back to room along with another friend and their face looked kind of astonished with little fear and more curiosity. I asked suddenly what happened and they said it's a leopard roar and it was coming from just behind our hostel room & we were Shell shocked to hear it but we were also frightened a bit to be honest.

We went downstairs and upon hearing the sound of Leopard my friend Narayan took the stumps of cricket and was going in the direction of forest and we were all started laughing so hard and it is remembered till today as how brave he was.

After we made sure it was leopards call, my friend and I went to terrace to pinpoint the exact location & type of call we were hearing, we searched online, confirmed that it's a mating call and not a distress call. We recorded the call and it coal coming in a frequency of every 6-8 minutes. It was a v sunny morning & we even forgot that we were sitting in morning sunlight for almost an hour. It was so fascinating to wait to that last minute & to hear the call of leopard. After confirming the type of call, we informed our institute director, and along with him we want to terrace of our administration block and we found out the location and direction of leopard. It was so thrilling to hear about the leopard stories from him & about the previous attacks happened in the region. Then soon after 8 AM, we did not get the call anymore and upon waiting for a long time we made sure that the animal her moved from the place.

Everyone was so thrilled & their face were all glooming with curiosity even though we didn't even wash our faces till that time:)

So, with lot of excitement upon hearing our director say we will go inside the Trambadi Forest and inspect the situation, as animal don't usually make that long call in one place unless it is not well or it is a mating call. We all 13 trainees quickly got ready by having breakfast and we took camera traps & along with our director, forest guard, 2 DRFO, we trainees left to search inside the forest for clues. Thus, our enthralling journey to the forest began.

Upon entering the forest, we faced some hurdles, as it was very dense & thick forest with steep slopes. It was very

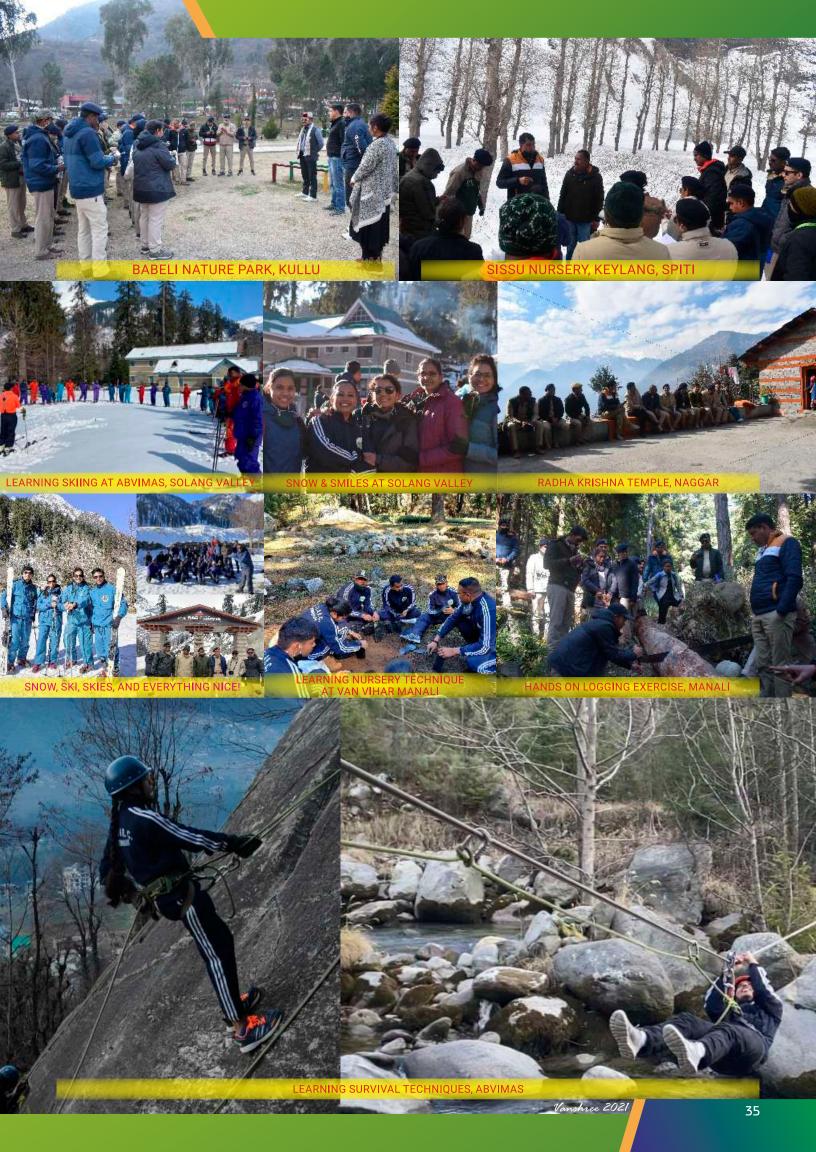
difficult to go inside but this small hurdle couldn't even deter the excitement we we're feeling. We searched, searched and it has been an hour already and there was no trace our friend. We all felt a bit let down as we were sure that we will have a leopard sighting in wild that day. We were bored and disheartened, soon our beloved director saw a Check dam inside the forest, and started teaching about the check dam requirements and benefits. We were all very good students, but on that day, we weren't ready to learn about check dam, all we want is to see a leopard not check dam.

We were all sitting on ground with exhausted face. It was a ground with thick vegetation & there were big boulders and we couldn't even see beyond 15m. It wasn't an easy path to travel, and we didn't have any interest to do anything. Suddenly like a thunder out of nowhere, a leopard's roar came from the back of a boulder and we were all stood up and we had a clueless face and some were frightened but me was beaming with excitement and it was a moment which makes us feel we are alive. So, our director told let's go in the direction of call, some of us with lots of thrill and joy Were eager to take lead but we had to follow the leader. We were crossing a small steep corner along a big rock & We couldn't see ahead what's there 10 m beyond. Then Leopard roared and the voice came from above the rock and we were all nervous as we didn't have any idea just what to do if we get a leopard. Then director asked some of us to stay back and We 5 people accompanied him. It was a very steep path with angle above 65°, We were forced to climb it with sticks as support. Upon reaching with lots of difficulty We managed to see leopard's tail while it is crossing along huge rocks and into a thick vegetation & cracks. Then it felt best not to follow it and we decided to put a camera trap along the spot and maybe it's our luck to see a leopard in its natural habitat, even though "All We Saw is a TAIL". It was a once in time experience, we had and it may be a common for foresters in future but it will always be our & especially my first-time enthrallment with wild and it's always on top of my list.

Sagar Shashidhar Bogur Roll No. 30 RFO Trainee, Karnataka



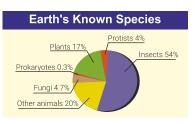




BIODIVERSITY: DOMINEERING CONTRIVANCE OF OUR PLANET

"Biodiversity" is important in natural as well as artificial ecosystems. It deals with nature's variety, the biosphere. Cho (2011) defines biodiversity as 'the variety of all living organisms including ecosystems, plants, animals, their habitats, and genes.' The term 'biodiversity' was first used by Rosen (1985) while he was planning the 1986 National Forum on biological diversity organized by the National Research Council (NRC) as noted by Dasmann (1968). Biodiversity also reflects the organization of organisms at different levels.

The Convention on Biological Diversity has reported that 1.75 million species have been identified so far, and most scientists surmise that the actual number of



all species—known and unknown—is at least 14 million.

Species	Number
Bacteria	4,000
Protoctists (algae, protozoa)	80,000
Animal - vertebrates	52,000
Animals - invertebrates	1,272,000
Fungi	72,000
Plants	270,000
Total described species	1,750,000
Possible total of all species (Including unknown species)	14,000,000

Source: UNEP/Global Environment Outlook

Importance of Biodiversity:

Biodiversity offers us with all the supplies of life and uphold and nurtures us. Biodiversity plays a undeviating role in climate regulation. Biodiversity is important in following ways.

- 1) Preserve air quality: Plants cleanse the air and standardize the composition of the atmosphere, by taking in CO2 during photosynthesis and liberating oxygen in the atmosphere.
- 2) Soil formation and preservation of soil quality: The activities of microbes and animal (bacteria, algae, fungi etc) break down organic matter, form soil and avert soil erosion.
- 3) Maintain water quality: Trees and forest soils decontaminate water; avoid siltation of rivers and reservoirs arising due to soil corrosion and landslides.
- **4) Pollination and crop production**: With plant and bees, butterflies, bats, birds interactions, pollination will bedoable, consequently would lead to increase in crop yield.
- **5) Pest control**: Safeguarding biodiversity can control 99% of impending crop pests.
- 6) Detoxification and rotting of wastes: About 130 billion metric tons of organic waste is processed every year by earth's decaying organisms.
- 7) Climate stabilization: Oceans, soil and vegetation are

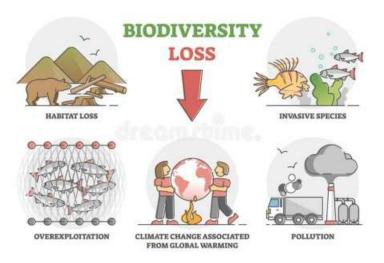


massive carbon sinks and help out to lessen the CO2 in environment.

8) Prevention and mitigation of natural disasters: Ecosystem biodiversity prevents erosion, nutrient loss, landslides, floods and impacts of storms.

Biodiversity Loss:

As the human populace keeps rising and consuming additional resources, biodiversity is being in danger of extinction more than ever before. Actions of humankind, like clearing woodlands, flaming fossil fuels, and urbanization are directly having consequence on biodiversity. The Millennium Ecosystem Assessment, (MA) published in 2005, listed five foremost threats to biodiversity. They are habitat change, climate change, invasive species, overexploitation and pollution (Ed. Debra Rowe, 2014). Each of these terrorization are rooted by human deeds.



Habitat change is a result of the human action of deforestation. This can over and over again result in a chain reaction effect. The deforestation on causes organisms to lose their dwelling, and it also causes more carbon to be released into the atmosphere. This leads directly into climate change. Climate change exhausts biodiversity in various ways. When the temperature starts to rise, the different flora and fauna cannot handle the effects and are as

a result extinguished., Earth's climate has become warmer and precipitation regime have changed.

The expected invasion of non-native species in abundant ecosystems has also been pointed out as a major driver of ecosystem change as a result of climate change. These adjustments will eventually lead to changes in ecosystem functioning around the globe. Globalization is the process in which individuals, ideas and possessions spread all through the world, incites more interface and amalgamation

between the world's cultures, governments and economies. Globalization progresses society by lowering end user prices, breaking divisions, and recuperating the overall benchmark of livelihood. Yet, nothing can come exclusive of a price. Regrettably, the price of exponential expansion of consumerism is that ecosystems were not given the appropriate amount of time to become accustomed to such hasty exhaustion of resources. Some of these mistreatments of natural resources include deforestation, commercial agriculture, excessive mining, etc. Because of globalization these activities are overexploiting resources that various species revolve around for endurance.

On the whole, the interconnectedness of biodiversity and



human welfare are imperative because biodiversity is the foundation for human well being. By ensuring life-sustaining resources and services that biodiversity offers to human societies, the preservation and sustainability of these make use of biodiversity in ways that also afford important benefits towards our health. The increasing loss of biodiversity on a global scale put across copious coercion to human health. Slackness to effects of the diminution of

biodiversity can be compared to knowing there is a bomb that is about to explode and not detonate it. Not reacting to this hazard is in humanitarian. Without a flourishing worldwide ecosystem that has the competence of supporting the diversity of life, a human population cannot exist or be continued.

The more variety, the better society....

Lata Guru Bhat Roll No. 15 FRO Trainee, Karnataka

पृथ्वी पर हम अकेले नहीं हैं

दया खत्म हो गई, हिंसा चरम पे हैं मानव और उसकी संवेदनाअंतिम मरण पे हैं

गर्भवती थी वो माता, फल देने वाला इंसान था कर भरोसा खाया उसने, उसके लिए तो भगवान था। भगवान और इंसान, भरोसा किया तूने यह कैसे, चंद मिनटों में फटा मुँह और लूथड़े फटे हो जैसे टूटे दात,फटी सूड, यह कृत्य इसान का गुरूर था तीन दिन से भूखी प्यासी, साथ बच्चा बेकसूर था। एक माँ खत्म हो गई, नफरत चरम पे हैं मानव और उसकी संवेदना अंतिम मरण पे हैं। पानी के लिए ऊँट मारे गए, रहने के लिए जंगल उखाड़े गए हंसी के लिए कुत्ते को डुबा डाला, भूख के लिए जान वरच वा डाला पृथ्वी के गर्भ से चूसा मीठा पानी फिर हवा में जहर मिला डाला मिट्टी के बांध गले में रस्सी उसका भी दम निकाल डाला उफ! दुनिया खत्म हो रही, लालच चरम पे हैं मानव और उसकी संवेदना अंतिम मरण पे हैं।

बस अब समय आ गया हैं,अब रोकना होगा हमें नहीं तो एक—एक कर के सब भोगना होगा हमें नहीं तो पड़ेगी भीषड़ गर्मी सब सूख जाएगा पिघलेगी इतनी बर्फ की सब डूब जाएगा। अभी तो बस छोटाअंश देखा हैं, पूरा खजाना बाकी हैं मूर्खता से मरे हैं कुछ हजार,न मानें तो पूरा जमाना बाकी हैं। हमे समझाने प्रकृतिअपना हक दिखा रही हैं, इस लिए हमें अब सबक सिखा रहीं हैं।

यह सदी पर्यावरण संरक्षण की हैं इसे मानो इंसानों के साथ वन्य जीव और पेड़ो का महत्व पहचानों प्रकृति रहीं तभी तुम बचपाओगे यह सच हैं मान लो नहीं तो फिर पछताओगे।। मांफी मांग लो प्रकृति से, वो सब जानती हैं हम तो उसके बच्चे हैं वो सबको पहचानती हैं। साथ ही मांसाहार भी हटाओअपनी थाली से वहां भी कोई बेजुवान ही मरता हैं तुम्हारी नादानी से। प्रकृति के बेटे इंसान और जानवर कोई चचेरे नहीं हैं। एक अदना से सच यह हैं कि पृथ्वी पर हम अकेले नहीं हैं। #श्रेयांश

> श्रेयांश कुमार जैन रो. न. 35 एफ. आर. ओ. ट्रेनी, मध्य प्रदेश



BEING A FOREST OFFICER

Forest Range Officer as a designation itself indicates, is a professional who holds the responsibility to safeguard the forests from illegal exploitation, poaching of flora and fauna of the are a under his or her jurisdiction and many more. Forest Range Officer(FRO)isthegazette officer equivalent to a 'Tahsildar' with three stars who incharge of the executive of a range. A forest officer should be the one who has the ability to manage and develop protected areas in terms of forest resource for the economic and ecological purpose. Thus, it is important for an FRO to possess the ability to think creatively and possess analytical skills. Humans as one of the members of the society plays a vital role in terms of forestry because we humans are the one who can either safeguard the ecological balance or can even leads to the environment destruction and ecological imbalance. So, as a forest officer, one should always keep in mind that heors he can bring a lot of changes to the society and environment as well. Forest officers perform critical and important tasks towards the bigger picture of balancing the ecosystem and spreading awareness about issues like global warming, deforestation, water scarcity etc. Forest Officer functions include estimation, survey, conservation and reporting of biological resources, live creatures and botanical resources with in the jurisdiction area of his/her posting. To be precise, this essay will cover the duties & responsibilities of a Range Officer, importance & my personal field experience of study tour during my training as a Range Officer Trainee in one of the most renowned forest training center name as Forest Training Institute & Ranger's College (FTI&NRC) Sundarnagar, located in the beautiful & scenic state of Himachal Pradesh, India.

Duties and Responsibilities if a Forest Range Officer

Given below are some of the important duties and responsibilities a Forest Range Officer holds:

- 1. Forest Range Officer should observe discipline in the work executed by his/her staff.
- 2. FRO has the responsibility of keeping a check over the charges and custody of the government property under his/her control.
- 3. FRO has to facilitate the management of the Range and hence, is an Officer in Executive Charge of the Range.
- 4. FRO should investigate his/her range for forest of fences and also prepare a charge sheet against the ones held guilty by the Divisional Officer.
- 5. It is mandatory to every Forest Range Officer to report the Divisional Officer in case of any misconduct of Subordinate.

Importance of Study tour and field visits for a Forest Officer

Since time immemorial, humans have an inborn instinct of inquiring about its surrounding, about the things that captivates our attention, about the unknown creatures in the wild. Without such instinct, human would have been passive as any other domestic animal. Such curiosity has given birth to the scientific discoveries & inventions of new things in the world without which today our earth would be in a nutshell as that of cavemen. This basic human curiosity needs to be fulfilled in life in order to pass on the spirit of rational thinking, critical inquiry & scientific mind set which is the basis of evolution.

Thus, field surveys are one such approach in education which tends to provides the learners with a first-hand experience of data collection through scientific steps. Field survey means collecting data outside the classroom, laboratory, library or work place in a natural setting. As a part of holistic educational experience, study tours and field surveys create opportunity for first-hand experience of learners that encourage critical thinking, retention of memory and awareness about the importance of the different components of environment.

There are various educational theories that supports the fact that field surveys generate original & creative thinking among the learners. One of the first proponent who gave birth to the concept & theory of 'Learning by Doing' was John Dewey. He was the founder of Pragmatic approach to education. According to whom, learners learn faster with greater retention capacity when they are engaged in some work. As Dewey has rightly stated, "Give the pupils something to do, not something to learn; and the doing is of such a nature as to demand thinking; learning naturally results".

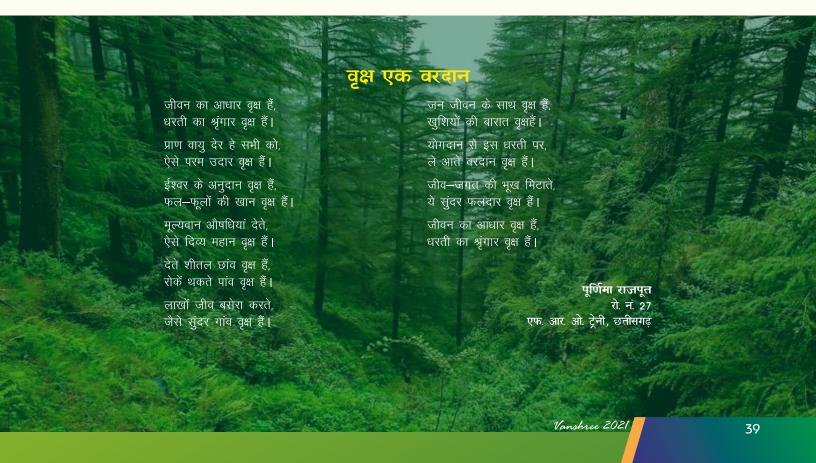
My Experience of Study tour on Forest Field Survey

Study tour has always been a part of my learning experience in the field of forestry. It encourages my way of learning in various perspectives and helps me in understanding the nature. Exploring the nature has always been a part of my life. I enjoy the thrilled of doing adventure. It seems to be the source of the illumination of my happiness. Moreover, exploring nature with a bunch of friends as a companion is much better & safer as compare to being alone. Belonging to one of the most rural part of India, i.e., Mizoram & belonging to a middle- class family, I never got the chance to explore other parts of the country. It is true that the more we come to learn about other people's culture, about their language, about the nature, the more knowledge we gain which ultimately shapes our thinking & perspectives of our life & that of others. Being a part of the FTI & RC,I got the opportunity to explore around different parts of India, which would have never been possible for me to experience this sooner. Our visit to almost all the corners of India including various important places like Biosphere Reverses, National Parks, Wild-Life Sanctuaries, Zoological & Botanical Parks, Museums, etc. of ecological importance has an enormous impact on my knowledge. I was someone who faces difficulty in recalling scientific names of any species and creature but today due to my exposure through study tour, I can at least recall a bunch of botanical & zoological names of flora & fauna that are common to our surrounding. Now I can teach & transfer my knowledge & expertise to my fellow citizens with proud. Sharing of knowledge to others gives me immense pleasure. It helps me to develop my self-esteem & self-confidence. Now, I am more aware of my environment, about the interdependence of various life-forms on earth. The study tours have indeed helped me in realizing my place as a human in the nature. Being a human being what I can do to support the survival of the beautiful diversity of creatures in the nature & the role that all the creature plays in the nature. That life is a cycle where each creature has a role to play and that we humans are not the only one who need this nature. That in order tosurvive humans needs to learn to live in harmony with all the other creatures of the nature, that life is all about giving & sharing life, that happiness lies in the eyes of theobservers.

In conclusion, I would like to highlight the words of Rabindra Nath Tagore, "The highest education is that which does not merely give us information but makes our life in harmony with all existence".

~ Save Forest Save Wildlife ~

Monankur Chakma Roll No. 19 FRO Trainee, Mizoram





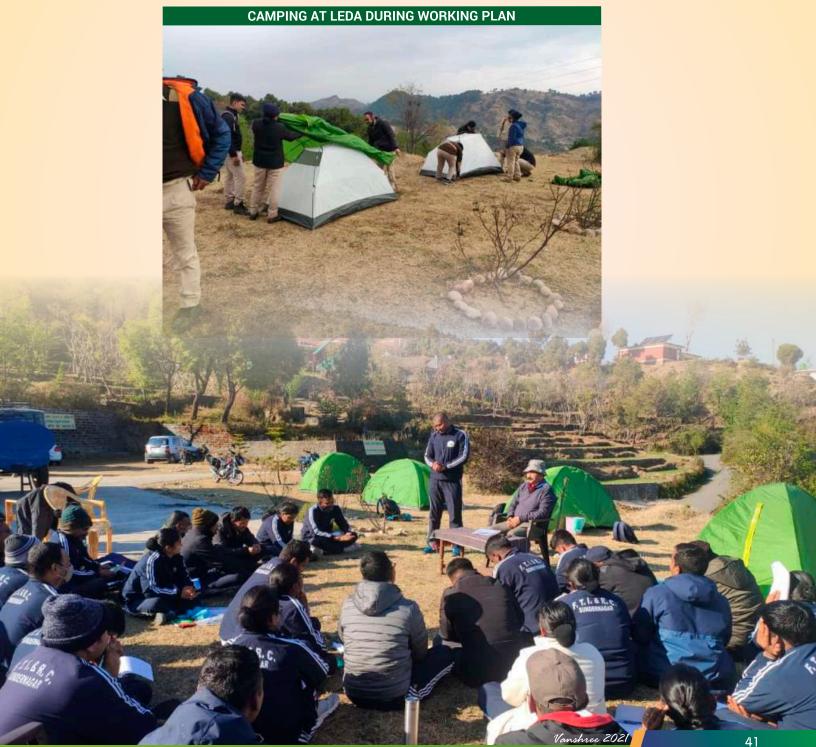












1st prize - Essay Competition (IBD 2020)

NATURE DURING COVID SCENARIO

Spread of novel corona virus (Covid 19) around the world, declared as pandemic by WHO has brought the world on its knees. Nature had been described to be getting a break as people are forced to stay at home.

In India, healing of nature has been seen in improvement in air quality. New Delhi which is the worlds most polluted city is seen clear blue skies. After 30 years Dhauladhar Ranges are visible from Jalandhar, Punjab. Critically endangered South Asian River Dolphin (Ganges Dolphin) are spotted in Kolkata ghats. Number of migratory flamingoes have increased in Mumbai. Ganga river has become fit for drinking in Haridwar. Instances of animals venturing into empty streets across the globe are being reported.

However, reports provide misleading impression that mother earth stands to be benefitted from the lockdown, especially in cities.

Outside urban areas the situation is very different. People in rural areas have less wealth. Their main savings remain in nature. Hunting, fishing, logging is necessary to provide food and support livelihood.

People migrated from rural areas to urban areas. As the lockdown has impacted the job opportunities, due to lack of employment, people are returning to their homes in rural areas. This increases the pressure on natural resources and also increases the risk of COVID transmission.

Opportunistic actors and criminal groups are resorting to land grabbing, deforestation, illegal mining, and wildlife poaching which provide easy money, taking advantage as the government is focused on fighting Covid. There has been reports from Asia, Africa and Latin America that area dependent on tourism for conservation are facing reduced resources as tourism has come to a halt.

Increased pressure on nature and rural areas will continue to persist until economies rebound and government and governments are able to focus on conservation.

False impression is being sent across, that protection of nature is secondary concern in controlling Covid. However, failure of protection may be the cause of this and future outbreaks.

Land use change by deforestation and the space is

threatened are twice likely source of zoonotic diseases being transferred from wildlife to human. Examples are Nipah virus, Kyasanur forest disease and the present Covid is said to have originated from live wildlife trade market in Wuhan, China.

Need to the hour is that the government should maintain strict law enforcement efforts. Countries should start planning economies with green structural transformation. Governments and financing institutions should prioritize stimulus efforts that have high economic multiplier effect and reduce carbon emissions. Natural climate solutions, protection of carbon rich ecosystems like mangroves, tropical forests, peat lands, rural support for ecosystem restoration.

Equally important is that climate and biodiversity stay at the top of the agenda in 2020 and beyond. Global efforts under UN (UNFCCC, UNCBD) are not unduly delayed, meetings can take place online if necessary.

International cooperation is the best opportunity to resolve future existential threats.

Covid-19 demonstrates how much we depend on each other. One humanity living on one planet, for our health systems as well as for our food systems and global supply chains. In Odisha, forest dwelling tribes Janameni, Kaliamba, Jalikeju have obtained variety of edible leaves and roots to add to food during lockdown.

Tribal conserve forest and in return the forest provides food, nutrition and livelihood security- wild edible, plants, roots, fungi and fruits.

Future of agriculture in wake of climate change being uncertain and predictions that disease outbreaks like Covid -19 would occur more frequently with more strength, ensuring food and nutrition security stands as the biggest challenge for the humanity.

In any of these situations, forest and biodiversity bear enormous hope as rich source of food while regulating climate as well as mitigating the effects of climate change.

Bharath SRoll no. 5
FRO Trainee, Karnataka





2nd prize - Essay Competition (IBD 2020)

NATURE DURING COVID SCENARIO

NATURE DURING COVID SCENARIO

Humans are tiny specks in this majestic Universe. Nature has been balancing the population

dynamics of all organisms since billions of years. It has taken care that no organism becomes

dominant over others. Chain of events like predation, diseases, natural disasters, food shortage

and others keep check on growing population of all organisms. Earth has witnessed mass

extinctions before which has led to extinction of many organisms and also has led to speciation.

The novel COVID-19 virus could be just another tool of nature in this chain!

On late December 2019 in a hospital in Wuhan city, in China an unusual pneumonia was

noticed with a link to an animal market that sells poultry, fish and other animals to the public.

In a month (26 January), the causal microorganism had been identified as a novel COVID19 virus that was named COVID-19. The emergency committee of WHO declared a global

health emergency on 30 January 2020 based on growing case notification rates at China and

international locations

A quote attributed to Aristotle Onassis says, "It is during our darkest moments that we must

focus to see the light." In these difficult times of global pandemic there has been great recovery

from environmental pollution. And drastic change in our lifestyle.

Because of the massive spread of COVID-19, the Governments of many countries like India

have put lockdown into action. The flights are being cancelled all over the world. Majority of

people are staying at home, practicing social distancing and working remotely. Consequently,

there has been decrease in air pollution rates, no traffic

congestions which equals to less usage

of petrol and diesel and decreased amounts of carbon emissions. Also, the water quality has

increased because of the less or no working of major industries.

The environmental effect of lockdown is seen regularly in news saying that the skies are clearer

which made Dhauladar range of mountains to be visible from Punjab attributed to decreased

air pollution. Many bird sightings are happening around India. And some mammals are seen

crossing the empty roads. All these incidents were previously unreported in recent century.

But unfortunately, these positive incidents of rapid change in our environment are temporary.

Because, as soon as the lockdown will be removed, normal life will be taken over again, and

again the environmental pollution will be continued.

As there are positive effects from present scenario, it has also resulted in environmental

pollution by medical wastes caused by wearing masks and gloves to protect from spread of

COVID 19.

Ultimately this COVID scenario is nature's wake up call for us human beings. For the Earth

will surely survive without us, but we will perish at one spell of mother nature. I hope, we learn

to live sustainably with nature and make positive changes in our lifestyle. So that, this clean

environment we got as a by-product of lockdown remains for the ages to come.

Sneha S KambliRoll no. 36
FRO Trainee, Karnataka



MY TOUR EXPERIENCE

Training is an organized procedure for increasing the knowledge and skill of people for a specific purpose. As a forester our training's specific purpose is to incorporate all the information and gain experience and knowledge on various aspects of forestry particularly vegetation types, zonation, organizational setup of forest departments, management of protected areas ecotourism, nursery management etc.

"To travel is to evolve" said by Pierre Bernardo and forestry is the science of observations. Hence tours and field visits provide a chance of observing, understanding and evolving one's perspective about the nature. In FTI & RC we started our first tour and forest related activities as an introductory tour which was conducted in the month of December (between 15/12/19 to 20/12/19). In that tour we visited different religious and historical places along with different forest sites such as Muraridevi temple, Nainadevi temple, Kamlah fort, Rewalsar mini zoo, Dharampur nursery etc.

In above mentioned tour we did a lot of trekking activity from which we learnt that physical fitness is an essential requirement for the job. We came through various management activities of the zoo and nursery and learnt about different flora and fauna of Himachal Pradesh. We got ideas of local vegetation and medicinal plants which was very useful for us as a forester.

Our second tour started in the month of January and was a 1-month long tour. In that tour we had to travel 3 states of central and west India, they were **Madhya Pradesh**, **Rajasthan and Gujarat**. In this way we got the opportunity to came across diverse flora and fauna of the above states.

In the above tour we visited various **tiger reserves**, **national parks**, **bird sanctuary**, **turtle conservation centre different zoological and biological parks**. By visiting the above places, we became able to know deeply about them and learnt about various management activities which carried out in the above forest sites. We knew the role and importance of rescue and rehabilitation centre. In this modern era of technology, we came across the high-tech monitoring and surveillance system to manage the wild life as well.

Apart from that we saw/experienced different ecotourism and conservation efforts by different persons and institutions. Some of them are familial forestry (by Mr. Shyam Sunder Jyani), GudaBishnoian eco-tourism and different nature education camp performed by Gujarat and Madhya Pradesh forest department. They taught us about the role and importance of forest in this modern world and necessity of forest conservation by educating children and common people.

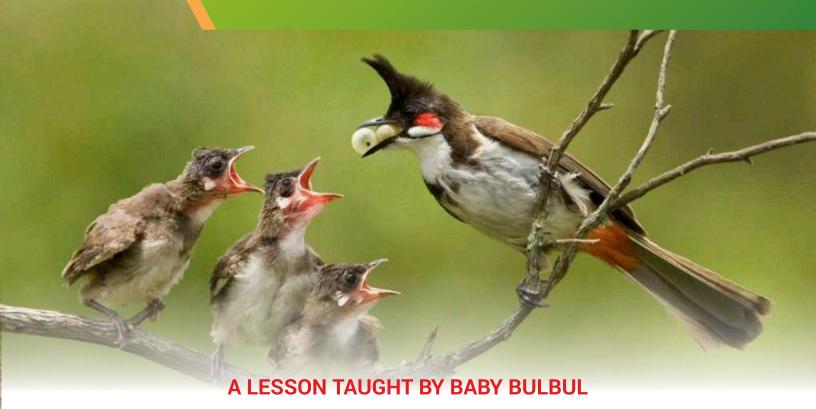


After that we visited IIFM, Bhopal CAZRI and AFRI, they are educational and research institute where different kind of educational and research work are performed. Most importantly research and development of forest and agriculture activities in arid areas.

So over and all it was fantastic tour where we learned a lot about time management, team working, wildlife management activity, high tech monitoring and surveillance system, different flora and fauna of different National Parks and especially of Marine and Desert National Park.

In the end one thing I must mention which is that along with the above study tour we got the opportunity to visit different historical and heritage places like **Sanchi Stupa**, **Bhimbetka Caves**, and **Khajuraho group of mountains**. So, the study tour in this way became full of fun and joy along with great learning experience.

Pushpesh Chandra Goswami Roll no. 28 FRO Trainee, Chhattisgarh



It was cloudy sky with gushing wind on the evening of June 2nd 2020 that we heard my mother screaming that baby Bulbul was falling off the nest. My Father, Sister and Myself rushed to the spot. Each of us suggested plans that immediately came to our minds. With short debate we decided to save the baby sparrow by catching it in hanging pot filled with leaves. As I went closer to the nest with pot to catch the falling baby bird its parent, which came with insect in its mouth to feed the babies, was observing my

efforts with anxiety and despair that I might harm its babies. Equally I was feared thinking that parent bulbul, thinking that I might be harming it, may attack me in anger. After confirming that parent is not angry/anxious I put baby into the hanging pot.

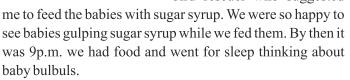
We were joyful that we saved baby from falling off. However, this joy didn't last long with my neighbour saying" parent bird leaves its child orphaned once it is touched by humans". An incident which seems to justify this statement took place. Parent bulbul which came after we moved away from the nest fed the insects to the two baby bulbuls which were present in its nest and didn't feed the baby which was present in hanging pot placed nearby. I was shocked by this incident. How could mother ignore its own kid just because it was touched by humans. What is this law of nature?

Meanwhile wind had increased its speed threatening safety of the two other babies present in the nest. Then sister suggested me to shift two other babies into hanging pot so that they can be saved from gusty wind. I was hesitant to accept her suggestion thinking that with our interference these two babies might be orphaned by their parents. As babies were under threat due to speedy wind, I had no option

but to shift them into hanging pot. After this parent bulbul came to nest. With no babies at nest, it returned in helplessness without making any effort to find its babies which were present in nearby hanging pot. This made us guilty that we were responsible for making all three babies orphaned.

With guilt on one hand and helplessness regarding what to feed them; how to nurture them on other hand my mind was blocked for a while. Later, as we had seen parent bird

feeding insects, we started searching for insects. Surprisingly each and every one including kids and elders in neighbourhood started searching for insects. Meanwhile, based on my friend suggestion I called up bird rescuer who suggested



Next day morning when I was having cup of tea, I heard my mother saying to neighbour that parent bulbul had come to the nest and is taking care of its babies. Hearing this I rushed to the spot. I was on cloud on after seeing that incident. It relieved me of the guilt I had and also thought me a lesson that" parent bird leaves its child orphaned once it is touched by humans" thought process which is in common man's mind is myth. The reason for parent not coming near its babies was because of the ruckus we created near the nest site.

Ravi Kiran Sampagavi

Roll No. 29 FRO Trainee, Karnataka

Vanshree 2021

Microplan















66

A brief overview of the

5th Batch

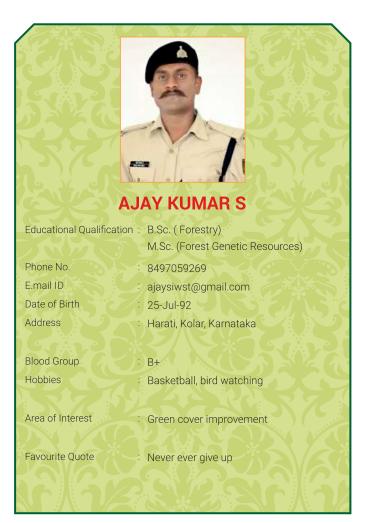
of the

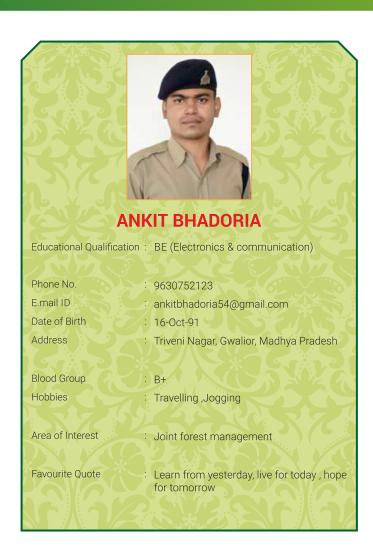
FRO Trainees

(2019-21)

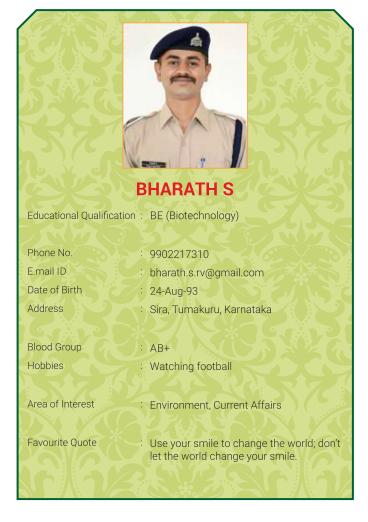
99

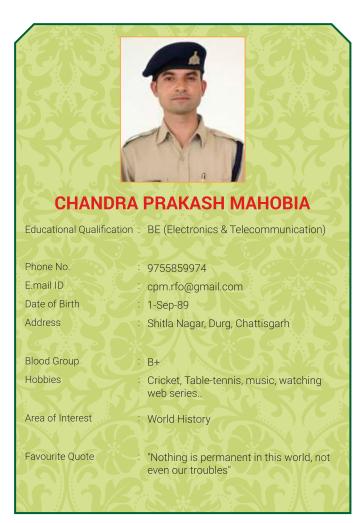


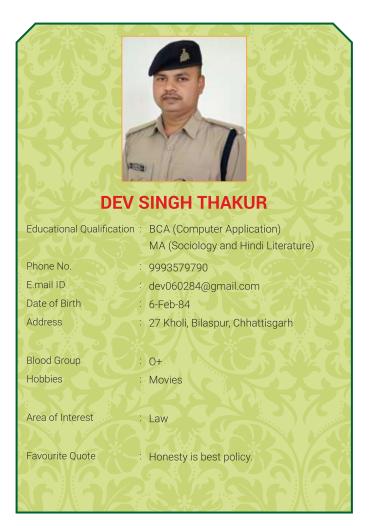






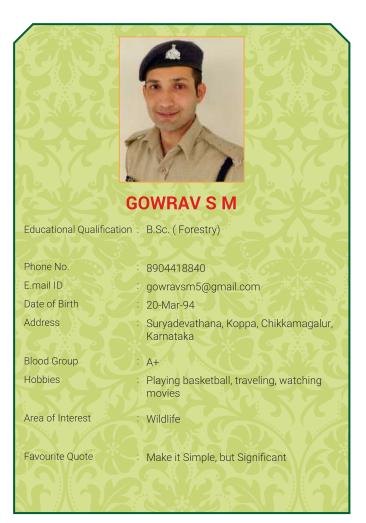














Phone No. 8095286970

E.mail ID jyotigm1927@gmail.com

Date of Birth 28-Apr-94

Address Unkal, Hubballi, Dharawad, Karnataka

Blood Group B+

Hobbies Butterfly watching, Tree Identification,

Area of Interest Forest and wildlife management

Favourite Quote We travel not to escape life

BUT FOR LIFE not to escape Us



Educational Qualification: B.E (Automobile Engineering)

Phone No. 7411087005

E.mail ID karthikkambli@gmail.com

Date of Birth 15-Jul-92

Address Alagundagi Oni, Hubli, Dharwad,

Karnataka

Blood Group

Hobbies Yoga, Walking, Sketching, Reading Non-

Fiction books

Area of Interest Human Resources Management

Favourite Quote *"There is nothing in a caterpillar that tells

you it's going to be a butterfly."*

~ R. Buckminster Fuller



KIRAN KUMAR P H

Educational Qualification: BE (Mechanical)

Phone No. 8197842190

E.mail ID kirankumarphk@gmail.com

Date of Birth 21-Nov-94

Address Vinayaka Nagar, Kamakshipalya,

Bengaluru, Karnataka

Blood Group AB+

Hobbies Bird, Butterfly watching, tree identification,

playing carrom, cricket, chess and poker,

Area of Interest Behavioural psychology with forestry

Favourite Quote No matter what anybody tells you, Words

and Ideas can change the world.



L R DARSHAN NAIK

Educational Qualification: BE (MECHANICAL)

Phone No. 9916106399

E.mail ID dnaik0507@gmail.com

Date of Birth 21-Dec-93

Address Kadlebalu, Davangere, Karnataka

Blood Group B+

Hobbies Playing cricket, Listening music

Area of Interest Joint Forest Management

Favourite Quote "Success is less about intensity and more

about consistency '

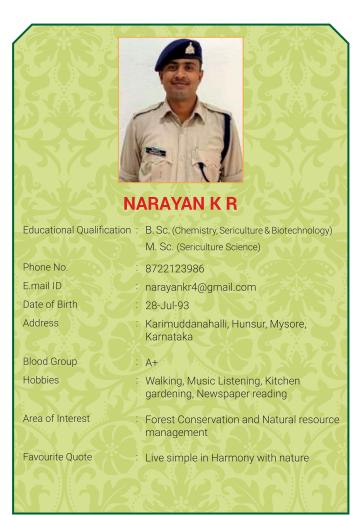












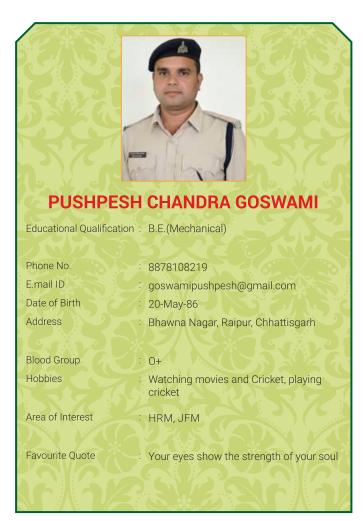














RAVIKIRAN M SAMPAGAVI

Educational Qualification: B.Sc. (Forestry)

Phone No. : 9591564549

E.mail ID : ravikiranms1995@gmail.com

Date of Birth : 12-Apr-95

Address : Simpigalli, Savanur, Haveri, Karnataka

Blood Group : B+

Hobbies : Travelling, Trekking, wild life photography

Area of Interest Forest Ecology and Biodiversity

Favourite Quote : The future belongs to those who prepare

for it today.



SAGAR SHASHIDHAR BOGUR

Educational Qualification: B.Sc. (Forestry)

Phone No. : 9741997253

E.mail ID : meetsagarsb@gmail.com

Date of Birth : 22-Jul-95

Address : Guruwar Peth, Kittur, Belagavi , Karnataka

Blood Group : O+

Hobbies : novel reading

Area of Interest : Behavioral ecology

Favourite Quote : In the middle of difficulty lies opportunity.



SAGAR SHUKLA

Educational Qualification: B.Tech.(Electronics & Communication)

Phone No. : 8318133092

E.mail ID : sagarshukla008@gmail.com

Date of Birth : 25-Mar-90

Address : Turkmanpur, Gorakhpur, Uttar Pradesh

Blood Group : B+

Hobbies : playing cricket, listening to music, reading

novels and urdu poetry

Area of Interest : Philosophy & Environment and Ecology

Favourite Quote : When you reach the end of your rope, tie a knot in it and hang on.Be an island of calm

in the sea of craziness. न दैन्यं न पलायनम्।



DR. SHAILENDRA SOLANKI

Educational Qualification: B.Sc. (Agriculture)

M.Sc. & Ph.D. in Plant Gentic Resources

Phone No. : 9911423782

E.mail ID : sss3iari@gmail.com

Date of Birth : 4-Jan-90

Address : Bajad (Basavi), Rajpur, Barwani, Madhya Pradesh

Frauesii

Blood Group : B+

Hobbies : Visit monuments & natural sites, Photo &

Videography

Area of Interest : Curious about Science

Favourite Quote : "Simplicity is the Best Policy"















