MANJIT SINGH, IFS

Addl. PCCF (Planning & Adm. cum Member-Secretary State Pollution Control Board)



joined Sikkim Forest Department on 23rd Aug 1980 as an IFS Probationer and went for Range Training along with M. L. Arrawatia to Singtam where the first thing we learnt was about cash book maintenance. At that time cash was maintained mechanically by the Territorial Range Officer indicating revenue from all sources such as grass, timber, firewood, grazing, sand and stone separately. First posting as ACF was in Working Plan when Office used to be at Deorali Bazar. We used to come from Forest Colony, Balwakhani on foot. At that time main Head Office was at Raj Bhawan.

During my four months posting in field in Ralang-Borang-Polok forests (an area rich in WL), we used to traverse the area and sight Barking Deer almost every day. The Gothalas used to say that Himalayan Black Bears were quite common and frequently damaged nearby crop fields. We prepared Working Scheme for forest areas which were later on extracted by Extension Utilization Division. When posted as ACF Wood Working Centre Bardang (Furniture factory and sawmill) a lot of Silver fir logs were lying in the sawmill complex which we converted into timber and sold to Army for internal panelling of army bunkers in high altitude areas. During my time I increased rates of furniture and for first time the Centre earned a profit.

In the year 1984-85 as Divisional Forest Officer (Extension and Utility), lot of fire wood, timber/charcoal was extracted from different areas. That time PCCF Mr. P. S. Moktan used to insist that we first sell the forest produce and only then get extraction cost based on sale proceeds. Around 1985-86 as DFO (T) West I had some tussle with the local District Collector (DC) who was trying to harass my field staff. After that there was complete stoppage of illicit felling in forest areas. At

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that time people got timber/trees for public coupes. When again posted as DFO (Planning) cum Technical Assistant to PCCF I helped the department in increasing plan budget considerably.

In 1991 for some time I was DFO Survey & Demarcation. From March 1992-1997 I went on deputation to FSI at Dehra Dun for about six months worked as Deputy Director; for four years as Joint Director (North Zone). I completed about four district wise reports about trees outside forest after complete analysis and conducting survey in villages of Haryana. Survey in whole Haryana completed during my tenure and analysis carried out, I planned survey in Western Uttar Pradesh (U. P) and sample village selected for pilot survey. During stay at Dehra Dun, I visited Jodhpur, Udaipur almost whole Harvana, Mathura, Agra, Baraeli districts. That was the most satisfying period of my career as Head of Northern Zone. Ours was the first initiative to plan and complete the survey reports of trees outside forest in States of Haryana, Western Uttar Pradesh which In learnt that later on my successor Mr. S. K. Sharma (Jharkhand) completed for whole of U. P. For about four months Dec'96 - Mar'97 had additional charge of Director FSI at Dehra Dun.

I came back to the department in March'97 and joined as CF (Working Plan) where I supervised completion of Working Plan of South Division, established 10 Herbal Gardens at different altitudes under NTFP and later got posted as Additional Chief Conservator of Forest (Territorial) to subsequently Chief Conservator of Forest (T). In the year 2005 I was promoted as Additional Principal Chief Conservator of Forest (Planning & Administration); delegated with power to sanction leave encashment and declared Head of Offices for Head Quarter. Subsequently I also got power to sanction medical/GPF etc. I disposed off most pending works in Administration section which were lying pending; prior to that only Head of Department used to do this job.

Last year in 2008 I was appointed as Member Secretary State Pollution Control Board (SPCB) where I rationalized rates of consent fee which were very low for projects above one crore. I will be retiring as Head of Department on May 2012. I enjoyed working in different positions in the state as well as Centre trying to give my best to the people of my state and country. I hope that future officers will be contributing according to their abilities and resources available at hand in future. I wish that during next centenary the Forest Department in Sikkim will achieve new heights in conservation and enhancing forest and natural resources of the state.



AN UNUSUAL EVENT

did my graduation from St. Joseph College, North Point, Darjeeling under North Bengal After completion of University. graduation in science stream, I was interested to teach in Schools but the same could not happen due to many reasons. And accordingly, I stayed unemployed for about a vear. In the mid of October, 1972. I was absorbed in the Transport Department in the Pay Scale of Rs. 170/- p.m. and subsequently almost after a month, I was transferred to the Traffic Sector in the post of Transport Inspector in the Pay Scale of Rs. 205/- p.m. I served the Government in the same category till February, 1975. In the beginning of March, 1975 I was selected in an interview for Higher Forestry and appointed as Assistant Conservator of Forest. Accordingly, I was deputed to under go two years training course in Higher Forestry at Dehradun, then Indian Forest College, presently Indira Gandhi National Forest Academy (IGNFA).

The training course was completed in 1977 and I joined the Department on 7.7.1977 forenoon. My initial posting was ACF, Cardamom. Later on I was posted to the Wood Working Centre, Bardang, where I got the opportunity to go abroad



N. T. Bhutia, IFS APCCF cum CWLW, Member Secy. State Biodiversity Board

to Japan for three months training from April to June 1978. I was promoted to the Division level while I was at Japan itself. After returning from Japan, I worked at Bardang till mid 1979 and got transfered to the Working Plan Division.

During my tenure as D.F.O. Working Plan or Working Plan Officer, enumeration of Reserved Forests under South district was undertaken with a meager fund. The field staff had to camp in the jungle for a month or so collecting the data of enumerated list for preparation of Working Plan.

This was the period when the field team was camping at Maenam Reserved Forest. I intended to go to field to see how the team was carrying out the field activities. Accordingly, one fine day, I along with an assistant reached Maenam Gumba and found their baggages dumped inside the Gumba. We tried our best level to locate them by calling and whistling but all in vain. Their footprints could be seen in the slushy mud and following these prints we crossed Bhale Dhunga and ultimately landed at a seasonal cattle shed. The time was passing very fast and all of a sudden, it became almost dark and there was no alternative except to halt in the shed. Nothing was carried for eating purpose because we thought that we would be landing in the camp of the field staff. At least, we could make a fire with the help of matchbox my assistant was carrying. We could not sleep well because of lack of sleeping materials (blankets, quilts or mattresses). Early at dawn in a semi sleep I saw a beautiful chain of mountains covered with snows in the front direction.

We got up and started for Maenam after washing our faces in a small stream and reached the Gumba around 6.30 a.m. I immediately prepared a small note and left it affixed with one of the beddings and moved further down to Ravongla.

Now an interesting event took place during that very day in the late evening. Actually, both of us were in haste to reach Ravongla so that we could satisfy our hunger and thirst but to our surprise we landed in a difficult gorge from where it was not possible to proceed further in three directions except to follow the back track. The process continued many times and ultimately we were fully exhausted due to many reasons. After repeating the process several times my friend started saying that he cannot walk further and it is better for him to die. He also said it was the trick of the jungle owner, who was misleading our path. To console him I told him that I too was equally tired but we cannot loose our patience. At last very late in the evening we could see some smoke coming out of jungle. A hope of survival emerged and we reached in front of a buffalo shed in the same jungle. We rushed inside and asked the Ghothala to sell us some milk but he said it is not possible instead he served us tasty tea in a big bowl, which helped us regain some energy. Then I told him to provide us shelter for the night and again the poor man was not in a position to do so because of lack of space and other necessary requirements. He prepared a home-made bamboo torch (locally called 'Pultho'), an old fashioned ignited torch with the help of kerosene oil, bamboo stick and used cloth together. He told us that there was a small village after descending almost a kilometer where we could get shelter.

With great difficulty we reached the village and accordingly got shelter and food for the night. This village later came to be known as Chitrey, 3-4 km after Ralang. The next morning after a walk of 2-3 hours we could reach Ravongla and immediately returned back to Gangtok. I was sick and bed-ridden for almost three continuous days.

Now, there is a saying that a rare plant exists in the jungle and if someone comes in contact with such plant, it will cause confusion in the senses and cause one to be misled in the jungle. Perhaps, the same incident took place with us and we had to suffer in such a fashion. This is a true event which I can never forget in my life.

Today I am serving the Government of Sikkim in the capacity of Additional Principal CCF cum Chief Wildlife Warden as also Member-Secretary Sikkim State Biodiversity Board, which gives me much satisfaction serving the cause of biodiversity conservation in my small but beautiful state. Also, I am very happy with my profession where I can serve my state and country in the conservation and protection of the Biodiversity of Sikkim.



My Orchid Passion

- Date of Birth : 16 September 1951
- Place of Birth : Gangtok Sikkim
- Qualification :
 - o First class BSc (Hon' in Botany) in 1976 from NEHU Shillong, Meghalaya
 - Two years Higher Forestry course from Burnihat Assam/Meghalaya (1978-1980), equivalent to M. Sc.
- Service: State Forest Service Officer in Department of Forest, Environment & W/L Management since 1978
- Specialized in Study of native Orchids and other wild flora of Sikkim
- Awards:
 - Bronze medal: in Water-colour painting competition in London Flower Festival February 2005
 - o State Meritorious Service Award: 15 August 2005



SUDHI ZONG LUCKSOM, SFS (Retd. Director)



Cypripedium tibeticum

have personally has carried out the actual field survey in Sikkim and adjoining areas of the state for twenty years in various locations and altitudes. Still the areas surveyed are relatively poorly sampled and really do not fully represent the state with vast chunk of virgin land still to be explored to find out the actual number of the species in the State. In my book The Orchids of Sikkim and Northeast Himalayas, except a few, I have drawn all the sketches of the species from the live plants and taken care that every part of the plant is well represented.

It took me more than six years to complete all 541 drawings and I am still updating my sketches. During 2005, I was sponsored by my cousin sister Ms Bathsheba Hartrey of Yorkshire to display my hand drawn sketch in the 'The Royal Horticultural Society London Flower Show" 15/16 February 2005 and there my sketch got Bronze medal.

My initial objective was just to acquaint myself with the plants growing in and around the Gangtok town. But my interest were drawn more and more towards studying the plant family Poaceae, but for want of good books and literatures I had to switch over my interest to study the more interesting family of plant kingdom "The Orchidaceae". At that time the books like Indian orchids: Guide to identification & culture by Udai Chandra Pradhan were available. My study was further enhanced when my friend Bejoy Gurung after seeing my interest gave me the rare orchid book "The Orchids of Sikkim Himalaya" by Sir George King and Robert Pantling. In my book I have provided every details of the plant in order to clear the doubtful existence of some distinct species which according to many needed further clarifications for proper justification, like doubtful existence of *Calanthe densiflora* and *Calanthe calvata* as distinct species; doubtful existence of *Cirrhopetalum trichocephalum* Schltr; and rediscovery of *Calanthe whiteana* and *Cymbidium whiteae* etc.

Initially when I carried out my field survey I came across many interesting orchids and I studied them in detail, drew all the sketches, recorded their measurements. Out of these I could



Liparis chungthangnensis



Liparis dongchenii

manage to retrieve only some from nature and published them as new species. Now I have more details but need supporting proof of herbarium and photographs.

SOME GREAT MEMORIES

In my long twenty years of floral expedition, spread over the vast area, covering mountain peaks, steep hills, warm valleys etc., I did not see any sign of the mysterious Yeti or encountered any life taking animals. However, I encountered with a few incidents, given below, which would remain in my memory for years.

The tiger pugmark

During one of my expeditions undertaken in the month of January 1986. while descending from Aralongchuk Mountain in West Sikkim, we came across the pug marks of possibly a Tiger at an altitude of 3500 m altitude. This I believe is the first ever recorded altitude, where the Royal Bengal Tiger has visited in the course of migration, that too in the cold winter season. The only reason, one can think of, for its visit to the area of this altitude, is to hunt the most sought after prev like Musk deer and Himalayan thar. The regular winter migration of tiger is up to Lachung (2400 m), in North Sikkim. The probable winter migration route for them is to start from Newra R.F. of West Bengal, follow the ridge of Pangolakha, Phadamchen, Assam Lingey R.F., Bulbuley ridge, and wherefrom follow the ridge up to Lachung.

Encounter with a Musk deer

Musk deer is extremely elusive. During my tenure of five years in Khanchendzonga National Park, as park manager, my effort to see Musk deer went unrewarded. Soon after I left the responsibility of K N Park, I under took Bikmatar expedition in North Sikkim. On the second day we tried to cross the ridge that stood before us. Forced to set up a camp due to heavy snowfall, I selected a wooded area near a small waterbody for the overnight camping. It was around 4 pm and my intuition told



me that a Musk deer would soon visit to drink the water from the waterbody. I bade everyone to keep silent. Suddenly the movement of the erect ears of a deer from a bush drew my attention. After a few minutes, that looked like hours, it emerged out of the bush. It was a Musk deer; I felt elated. Though it was dusk and the visibility was poor, we could see the beautiful animal clearly as it came closer giving us its clear full view. It started grazing on the low grass, its eyes fixed on us all the time. We sat frozen bewitched by the beauty of the animal, not daring to move even to get a camera, lest our guest would bolt away in fright. Overcome with temptation my cousin moved a little to get the camera; the animal took flight, hopping on the soft snow covered ground and faded away in the thickets of Rhododendrons.

An overzealous drunken man

Once in the month of April 1990, I went to the forest area of Takchi Palace which extends to a considerable area, to carry out my orchid survey. When I came back and was about to board the vehicle that was parked outside the entrance gate to the area, a fully drunk man came out from within, started shouting and throwing stones at us. To my great surprise he himself broke down the gate and startd blaming us for the damage. Not content yet, he rammed the bonnet of my vehicle with a big stone damaging it. He then snatched away the sketches of the plants I had drawn. With the help of Sikkim Police the matter was settled and I took out my vehicle from the area. Later on my sketches were returned by the Police.

Almost behind bars

It was the month of April, 2002. On my way back from Siliguri after buying ivory paper for the sketch, a tree full of Aerides multiflora, fallen the side of the Highway at Sevoke caught my eye. I stopped the vehicle alighted from the vehicle to take the photographs of the flowers. As I was engrossed in





taking photographs, I was suddenly surrounded by army personnel and was quizzed for an hour. I did not realize it was an area falling within the army cantonment within which taking photographs was prohibited. When I explained that my intention was honest and produced my ID Card to the substantiate my identity, they were convinced of my innocence and was allowed to leave but not before a piece of advice from the Subedar Major.

Lost but found

As a well trained forester I had full faith on my sense of direction and my capability to negotiate in any kind of trail in dense forest without getting lost. This confidence was shattered by an incident that took place when I was in an orchid expedition in Chiyabhanjyang area, the transboundry area of Sikkim Nepal border. The weather in the morning hours, when we reached the destination was fine. There is not much human habitation near the border and the police stationed at the border checkpost, happy with our arrival, helped us with hot tea. After sometime weather suddenly changed and strong winds combined with heavy rain confined us within the forest log houses, where we had settled. At about 1/2 a km away from our camp there are two lakes, known to a few number of people only, on the Nepal side of the border. When one hears about these lakes, one gets an impression that they are almost mystical. Nobody knows since when and why the myth that a person who visits lakes cannot come back, is in circulation around the area. The police personnel advised me not to go near the lakes. In the afternoon the weather improved. Our objective was to find a particular type of orchid. I dispatched one party towards Singhalila Range. I do not believe in the myths. I went along the borderline towards the lakes surveying forests on both sides. In the hope of rediscovery of the rare and endangered orchid I went around the lakes. My enthusiasum pushed me further beyond the lakes. I was so much engrossed in my quest of orchids that without realizing I strayed and lost my track. The mist was thickening, darkness was approaching and I was enmeshed in thickets of spiny bushes. I had to reach the ridge for safety and I frantically fought with the bushes and ran here and there to find the trail till I was too exhausted to move. I sat on a stone and closed my eyes to pray. When I opened my eyes I saw some footprints of Yaks on the murky ground. I followed the trail and at its end I saw a Yak. It was already dark and I thankfully rested, mind at rest with the thought that the Yak boy would appear to collect the Yak. I saw the boy come as expected and was thus rescued.

Publications:

24 scientific papers on Orchids of Sikkim in various journals. Out of these 12 species are new species to science and others are rediscoveries and new reports for Sikkim including the following:

- (1981) A new species of Calanthe R. Br. (Orchidaceae) from Sikkim Himalaya, Journal, Bombay Nat. Hist Society. 95(2): 319 – 321.
- (1992) A new species of *Liparis* Richard (Orchidaceae) from Sikkim. *J. Bombay Nat. Hist. Soc.* 89(1): 105-106.
- (1992) A new species of *Cleisostoma* B1 (Orchidaceae) from Sikkim. *Indian Journal of Forestry*. 15(1):27 – 29.
- 4. (1993) Rediscovery of a Rare Indian Orchid Species *Yoania prainii* in Sikkim Himalaya. *Panda newsletter* Vol. 1(2): 14-15.
- 5. (1993) *Coelogyne barbata* Griff (Orchidaceae), a new record for Sikkim Himalaya. *Indian J. Forest* 16(2):183-185.

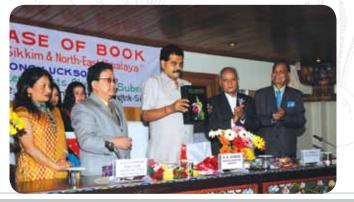
- (1992) A new Species of Calanthe R. Br. (Orchidaceae) from Sikkim. Indian Journal of Forestry. 15(9):136 – 138.
- (1993) A new Species of Calanthe R. Br. (Orchidaceae) from Sikkim. India. Indian J. Forestry 16(4): 385 – 388.
- (1993) A new Species of Goodyera R. Br. (Orchidaceae) from Sikkim. India. J. Indian bot. Soc. 72(1993): 191 – 192.
- 9. (1993) Rediscovery of a Rare Indian Orchid Species Oberonia orbicularis Hook. F. in Nature. Indian Journal of Forestry. 17(2); 182-183.
- 10. (1994a) Rediscovery of *Cypripedium himalaicum* Rolfe and *Cypripedium elegans* Rebh.f.(Orchidaceae) from Lachen Valley of Sikkim. *J. Indian Bot. Soc.* 73:337-338.
- (1994b) Rediscovery of *Calanthe whiteana* King & Pantling – a very rare Indian orchid endemic to Chungthang Valley of Sikkim. *J. Bombay Nat. Hist. Soc.* 91(1): 163 - 165.

46 I SIKKIM FORESTRY 100 YEARS OF SERVICE

- (1994) A new species of *Liparis* Rich.(Orchidaceae) from Sikkim Himalaya. *J. Indian Bot. Soc.* 73:159 – 160.
- (1997) A new species of *Cheirostylis* Blume.
 (Orchidaceae) from Sikkim India. *Indian Journal of Forestry.* 20(3): 305 - 307.
- 14. (2000) A new species of *Liparis* Rich.
 (Orchidaceae) from Sikkim Himalayas. *Indian Journal of Forestry.* 23(1): 113 – 115
- 15. (2002) A new species of *Oberonia* Lindl. from Sikkim.*The Orchid Review.* Vol. (110), No. 1248; 346 – 348.
- 16. (2003) A new species of *Gastrochilus* D. Don. from Sikkim.*The Orchid Review*. Vol. (111), No. 1253; 278 – 283.
- (2003) Eria pusilla (Griff.) Lindl. (Orchidaceae): a new record of Sikkim. J. Orchid Soc. India. 17(1 – 2): 27-29.
- (2004) Liparis chungthangnensis. (Orchidaceae) A new species from Sikkim. India. The Orchid Review. Vol. (112), No. 1255: 14 - 15.
- 19. (2004) Zeuxine seidenfadenii Som Deva & Naithani (Orchidaceae): A new record for Sikkim. Indian Journal of Forestry. 27(2): 179 – 180.
- 20. (2007) *The Orchids of Sikkim and North East Himalaya*. Published by S. Z. Lucksom 2007. 984 pp.
- 21. (2009) Birds of Rabdentse R.F. in West Sikkim, Panda newsletter Vol. 2(1): 46
- 22. Biodiversity of Raj Bhawan (Pictorial Booklet)
- 23. Presently working on documentation of Ferns of Sikkim
- 24. Misc note in JBNHS on Ward's Trogon Harpactes wardii
- 25. New Record of *Aristolochia* from West Sikkim published in Indian Journal of Forestry

14 New species, 3 new Variations, 5 Rediscoveries, 3 New records for SIKKIM

- 1. Bulbophyllum trichocephalum var sikkimnense S. Z. Lucksom
- 2. Bulbophyllum pantlingii S. Z. Lucksom
- 3. Calanthe anjanii S. Z. Lucksom
- 4. Calanthe keshabii S. Z. Lucksom
- 5. Calanthe yuksomnensis S. Z. Lucksom
- 6. Coelogyne pantlingii S. Z. Lucksom
- 7. Cremastra appendiculata var sonamii S. Z. Lucksom
- 8. Dendrobium eriiflorum var sikkimensis S. Z. Lucksom
- 9. Goodyera dongchenii S. Z. Lucksom
- 10. Gastrochilus sonamii S. Z. Lucksom
- 11. Liparis chungthangnensis S. Z. Lucksom
- 12. Liparis dongchenii S. Z. Lucksom
- 13. Liparis lydiaii S. Z. Lucksom
- 14. Liparis sikkimensis S. Z. Lucksom
- 15. Oberonia kingii S. Z. Lucksom
- 16. Cleisostoma sikkimensis S. Z. Lucksom
- 17. Cheirostylis pabongensis S. Z. Lucksom
- 18. Cymbidium whiteae King & Pantling (Rediscovery from Rumtek)
- 19. Calanthe whiteana King & Pantling (rediscovery from Lachen)
- 20. Coelogyne barbata Griff. (New record for Sikkim)
- 21. Oberonia orbicularis (Rediscovery)
- 22. Cypripedium himalaicum Rolfe. (Rediscovery)
- 23. Cypripedium elegans Rchb. (Rediscovery)
- 24. Eria pusilla (New record)
- 25. Zeuxine seidenfadenii (New record)



FOR-REST



BEJOY GURUNG SFS, Director Research, Education & Extension Circle (Retd) y journey with the Department of Forests, Sikkim started way back in 1978. My first memory is of the time I appeared for the general knowledge test at the office of the then CCF at Raj Bhavan complex (The Residency). Many things conspired to make it a hearty recollection for me. One of the most precious of them is the time when I saw the question paper and drew a blank. I looked at my dear friend and invigilator at the time, Mr. S. T. Lachungpa, who unfailingly helped me by giving me the General Knowledge book in the rest room.

Unfortunately, I had lost touch with books for some time and could not maneuver my way to the right answers. However, I did well in other subjects and managed to acquire a second position in the over all exam. The first position was secured by Mr. S. Z. Luksom, who went on to become my long term friend and the sturdiest pillar of support all the way through.

The two of us were selected as fresh ACFs that year. However, due to some inexplicable circumstances in the Department, my training was deferred for a year. Nevertheless, it did not hinder me from thoroughly enjoying and excelling during the two years of training at Burnihat, Assam.

My first posting, after the completion of training, was in Land Use and Implementation Board, as Forest Expert. For a fresh forester to be given a proficient position (or at least the name suggested so), I was pretty content. The board was headed by Mr. H. R. Pradhan, now a BJP leader. He was kind enough to send me for six-month training to the Institute of Soil and Water Conservation, Dehradun. Ironically, I never got assigned to the concerned division where I could make use of this training and knowledge.

The turning point of my career came in 1991, when I was posted as DFO (T), South. After ten uneventful years, I got my first field exposure. During this time I did significantly interesting work, like dealing with law and order situation in forests, organizing motivational meetings, removing cowsheds from reserve forests, *et al.* The kind of help and support I got from the entire district administration as well as the public is worth a mention.

With the encouragement and help of orchid enthusiasts like Mr. T. B. Rai, Dr. Narayan Rai and Mr. D. T. Bhutia, the Namchi Orchid Growers' Society was established. Consequently, people from in and around

Namchi, developed interest in floriculture and related trade. Flower shows and exhibitions are still held annually in Namchi.

Nevertheless, the most significant part is that I got inspired to embark on the study of medicinal plants. By the time I came back to Gangtok as DFO (MFP) on June 1995, I was fully prepared to attempt a book pertaining to the research I did.

A promotion to the rank of Joint Director, Research, Education and Extension, in 1997, put me back to a period of dormancy. On the other hand, it also proved invaluable for developing my knowledge about medicinal and aromatic plants through theory as well as practice. In the process I traveled extensively and met people from myriad spheres. I have vivid memories of my visits to the interiors of Nepal and the Bhutanese refugee camps there, in search of information on the indigenous practices. It was a thoroughly fascinating experience.

Fortunately, all this culminated in the publication of a book 'Medicinal Plants of Sikkim Himalayas' in 2003.

Mr. K. C. Pradhan, renowned planter and authority in the plant biodiversity in the Himalayas, graciously wrote the foreword for it. He was my greatest mentor and motivator while I was working on the book.

He also gets credit for my being in forestry in the first place. As it happens, my late father, Mr. C. B. Gurung, called on Mr. Pradhan to express his desire about sending me for forestry studies to which he concurred. The same evening, my father gave in to a fatal heart attack. The day was 27th August 1973. I hope to have lived up to their expectations, as I have put in my honest efforts towards making it worthwhile.

Now as a retired forester, I am quite complacent of my 29 years of service despite several anomalies in the department, particularly the cadre issue.

Apart from the study and documentation of Himalayan indigenous systems, I have chosen natural farming as a major objective. I would like to popularize it among my fellow farmers. Furthermore, I recommend and advocate an eco-friendly lifestyle going back to basics and bare minimum.



FORTY-ONE YEARS OF SERVICE



Bharat Darsan, Rotang Pass Himachal Pradesh during SFS Training – 1983-85

Some Memories

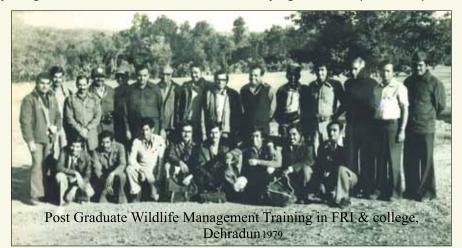
was born on 3rd February 1950 in post independence era in a remote village Hee Keyongbari of erstwhile Kingdom in West Sikkim and brought up in a typical large-sized Pradhan business family with 14 siblings whose well being and education must have been quite a burden for my parents. I remember the sweet memories of infant class at Hee Middle School in 1955 using stone pebbles to write ABC and still experience the stinging bite of 'Titaypati' (*Artemisia vulgaris*) 'Beth' (whip) by late B. B. Poudyal Sir. I shifted to Soreng Junior High School in Class III becoming one of the three top-listed meritorious students and subsequently moved to Government High School Darjeeling in 1964 in Class IX, passing out Class XI in 1967 to join Government College Darjeeling. Back then

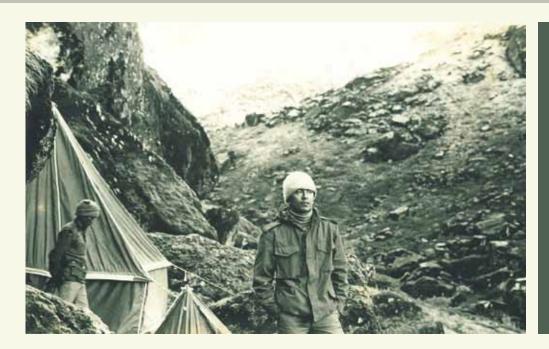
there was no college in Sikkim and I remember only few students enrolled from South, West and North with majority from East, the so called elite district of Sikkim. I graduated with a Bachelor of Arts (BA) Degree in 1974.

After graduation I packed up for home and started helping in my father's business. My father late Hasta Bahadur Pradhan promptly assigned me work for obtaining indent and procurement of explosives (gelatin, detonator and safety fuse) usually granted from SPWD store Gangtok, for Kaluk- Dentam road restoration work. As a loyal son I rushed to the capital, which almost took two days to reach due to poor public transport system. When I landed in Gangtok it was an entirely entrancing new world for

H.P. Pradhan, IFS Chief Conservator of Forest, Wildlife

me. In those days despite being the capital, Gangtok's main market street presently MG Marg was silent and thinly populated. There I came across a few of my college mates who insisted I should join Government service. Truly speaking, I was totally ignorant what Government service was, because none of my family members were inducted in the 'Sarkari jahgir' at that particular point





Operation Musk Deer Trap Demolition in Kasturi Orar, KNP in West Sikkim – 1980

of time. I was in total dilemma and in those days there was no communication system to contact my parents and relatives for taking decision for seeking Government job. The only option was either to go back home for permission to join service or to stay back home and help my father in his business. But as a matter of fact I was always quick in decision making and committed to disposing off work assigned to me refraining from any external interference and pressure. So at one stretch, I finished the work given to me at Gangtok, and arranged to parcel the material through another contractor to my father.

It was in the fag end of May 1969. I was accompanied by some of my friends from Gangtok to apply for job to



Wildlife Week - 1980 at Rabongla the then HMF Mr. Atup Lepcha, Shri P.O. Pazo, CCF (Retd.) Late Shri P.S. Moktan, PCCF (Retd.).

Secretary, Establishment Department. In those days it was quite easy to seek Government job due to limited eligible qualified candidates. I still remember submitting my application for a post in the Printing Department (Sikkim Darbar Press) to the then Secretary, Establishment, Late Yap Shri T. S. Gyaltsen who immediately passed the file to the Executive Officer late C.M. Rasaily (father of Shri Kiran Rasaily) for appointment order which was promptly approved by the SIDLON of Sikkim (Head of Administration as Prime Minister of Sikkim) and the order was issued immediately within one and half hour for the post of Store Keeper in the scale of Rs. 145/- signed by the Executive Officer. The total emolument was nearly Rs. 200/- per month. By virtue of my hard work and dedication for almost 10 months, I was promoted to English Proof Reader (vide O.O. No.159/Ptg dated 13th March 1970 in the scale of Rs.170-5-295) which was the highest Non-gazetted scale during that period. I was also in additional charge of Foreman and junior in hierarchy to Shri P.T. Gyamtso IAS (retired) Pr. Secretary and Ex-Member of Parliament, Rajya Shabha. Shri C. D. Rai IAS (retired) Secretary was Director Information and Public Relations and Shri Tamding T. Bhutia was Manager, late Shri Vagaysore Rai Nepali Editor, late Shri Dean Gasper Editor English, Sub-Editor Shri Sailesh Pradhan were all the press fraternity of Sikkim Darbar Press during that period. Working in the press was very challenging and team work was a must to print, publish and release daily Bulletin. Sometime we had to work till late night to complete the printing of special news bulletins.

In the meantime I heard that the post of Ranger in the Forest Department was lying vacant and seat for Direct Deputy Ranger in Dehradun was requested by Government of Sikkim. Having heard that Forest service is Royal service I was thrilled and excited about this opportunity and fulfill my real quest of career as a forester. So I applied for the post of Ranger as departmental candidate to the Forest Department headed by Shri K.C. Pradhan IAS then Conservator of Forests; but no seat was allotted for Sikkim that year for 1970-72 batch. However there was an interview for forester training in Dow-Hill Kurseong. The selection process was completed for four posts and one of the names was mine and Office Order was issued on 28.10.1970 signed by the Shri P.O. Pazo DFO Administration for undergoing training. It was one of the turning points of my career.

After the successful completion of training from West Bengal Forest School, Dow-Hill Kurseong I was posted with three other foresters Mr. M.P. Rai (retired), Mr P. Gyalpo and Mr. T.R. Bhutia in December 1970 for carrying out 100% enumeration of trees of Assam Linzey Forest for which one had to trek for 5 km from Sethi Pool for assessment of growing stock and for testing feasibility of installing Mono-Cable ropeways for commercial tapping of forest produce. The team was led by Shri D.D. Sharma IFS CCF. Most of the time the team camped inside the remote Kharka (pasture transit camp) with the enumerators engaged who were class XI students of Higher Secondary School, Gangtok during their winter vacation. I remember Shri K.N. Upreti Ex-Minister was one of the enumerators with us. During those days command and order of the Government and seniors was very astringent and one had to abide by the instructions and orders with dedication and firm commitment.

We were given three months to complete the enumeration, compilation and working out the total volume of forest produce for installation of Mono-cable Skyline ropeways for tapping the produce of timber and fuelwood for Gangtok and other parts of the state, or else we would be liable for disciplinary action. As a matter of fact we did not come out from the forest for three months except some hours bunked to visit Maghey Mela at Saramsa Garden. We completed our work before the specified time and still I remember the days without work when we went Kalij trapping and hunting with Mr. M.P Rai Forester and professional hunter. In those days there was no ban on hunting or conservation oriented programmes. Truly speaking many Forest Officers, civil servants, and public were actively involved in hunting as a status symbol and they were proud of being Forest Officer.

My next posting was Block Officer (Territorial) Sombaria under Namchi Range. I took over the charge from Late Shri Glore Tsering Lepcha of Rumbuk, West Sikkim. Shri D.D. Sharma CCF retired and Shri R.N. Thapa DFO retired were Range Officers (RO) Namchi respectively. Good conduct, discipline, promptness, timely disposal of forest cases were some of the foremost qualities of a good forester. We had to take orders through Wireless messages and without prior approval of the immediate officer one couldn't move from the Head Quarter. Tour programme for every month had to be approved in advance from the superior officer through DAK carried by SNT buses plying from one station to another station. We had to conduct extensive tour on foot as per the approved tour programme along with forest guards within the jurisdiction of our Block and submit daily activities tour



Batch of State Forest Service in Burnihat - 1983-85



With His Holiness The Dalai Lama in Deorali Orchid Garden, Gangtok along with Sri P.L. Gurung the Minister for Ecclesiastical Dept., Shri N.C. Shenga, PCCF (Retd.) & Shri P.K. Basnett, PCCF (Retd.) and S.T. Lachungpa PCCF cum Secretary

report in every consecutive month otherwise our salary would be held up. Cash Accounts (CA) had to be submitted monthly with any discrepancies leading to our salary being held up and explanation to be given. As a result not a single paisa of revenue was misused.

It was one of the remarkable incidences that one fine afternoon I received WT Message at 12.30 from R.O. Namchi to report at Hilley by 2.00 pm. I was totally panicked and worried about my reporting at 2.00 pm at Hilley within one and half hours where as normally it took three hours to reach Hilley. I had to rush to Hilley to abide by the order of Range Officer who was reaching Hilley by 2.00 pm. I climbed up the hill via Gopini Forest and reached Hilley by 2.30 pm by the time Shri R.N. Thapa was already sitting near the chimney (Hilley is situated at 9000 ft altitude). I wished him but there was no response for half an hour. Suddenly he started scolding me and repeatedly told me why you are late by half an hour to reach Hilley. Somehow I could convince him that the WT Message was received by me at 12.30 pm and I could reach Hilley within two hours although it takes three hours for young people to reach on foot. I thought I had been pardoned for my delay in reporting, but the chapter was not closed. When Mr Thapa went back to Namchi and he called me for an explanation which I had to submit in writing. This was the command and code of conduct during that those days in the first lap of service.

There were 165 families of Taungyadars in Bhareng, Hilley, Nasa under Sombaria block I used to camp with them for entire plantation season. The plantations created by the Taungyadars in Hilley Bhareng, Nasa, Begha of Champ, Dhupi, Kapasi, Piplay, Tooni, Phunchey, Kawla and other locations along the Teesta Rangeet Belt for Teak and Sal are the most successful plantations and presently are well established and valuable. I can strongly state that the Taungya system was one of the most successful and sound management system of forestry. I also extensively toured Toriphulay, Phalut, Tulo dhap, and Deonigali dhap.

In March 1972 the then Chogyal Palden Thondup Namgyal visited Hilley and camped for two days. As a B.O. Sombaria I had to arrange everything for His Majesty, Hon'ble Executive Councilors, his entire contingent and security for their stay, food, etc in such a remote place. RO normally visits before the VVIPs arrived. DFO used to accompany



Flower show in White Hall, Gangtok with Shri P.K. Basnett, PCCF (Retd.) & Shri H.C. Mukhia, DFO (P&G) Retd.



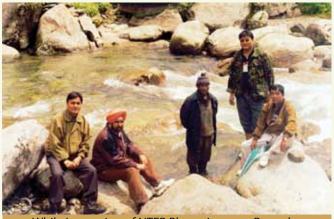
Logging Operation in Garpenberg, Sweden – 1989

with the VVIPs. I remembered from the Chogyal regime the Forest Officers had been engaged in arrangement of State Banquet and other Official functions of the Government including hospitality. The Forest Officers have special quality and capacity to discharge such activities in any time of given situation. I have carried out such duties and responsibilities for almost forty years right from the regime of Chogyal, to the democratic form of Government from 1970-71 to 2009-10.

In August 1974 I was posted as BO Gyalsing. I was in charge of all construction work and Rest Houses of Gyalsing Range. At that time in 1975 late Shri Santijung Gurung RO was temporarily posted for construction of forest road from Phunchebong to Hee Patal as a drought relief activity to provide employment to the local people of that area. Shri P.K. Basnett PCCF-Secretary retired was DFO South West with headquarter at Tikjuk, Gyalsing. Uniform code was very strict in those days. We had to put Khaki uniform, hunter boot, solar hat, raincoat, if it is rainy day for almost seven days in a week, either in field or in office. I remember one fine morning I was passing along the road of DFO quarters in Tikjuk wherein Basnett Saheb was sitting on the cane chair enjoying morning sun and sipping Bournvita when suddenly he called me and said "are you going for film shooting?" I was shocked for a while and realized that I was in civil dress. One can imagine how strong the discipline and dress code was. I had widely traveled to Dzongri, Thansing, Lampohkhari, Aralunchok during the tenure of posting in Gyalsing. I used to travel in a day for inspection of work from Gyalsing Chumbong, Thingling to Yuksom Tashiding via Gerethang on foot and reached Legshep-Gyalsing by bus by same evening. When I pass through the Pelling I feel very happy to see the well established plantation forest of Champ, Dhupi, Oulay Champ created by me as BO during 1975.

In April 1976 I was selected for Ranger training in Eastern Forest Ranger's College St Mary's Kurseong .My other training mates from Sikkim were Shri K. Yonzon, late Sukraj Rai, Shri T.R. Bhutia. After the rigorous training of two years in the college we passed out successfully in April 1978. I was posted as RO Soil Conservation, East District from May 1978 to August 1979. During the tenure as RO SC much landslide area has been treated with biological and engineering measures.

In August 1979 I was deputed for undergoing training for 2nd Batch Post Graduate Diploma in Wildlife Management in Forest Research Institute Dehradun. Mr Chezung Lachungpa IFS, CCF LU & Env was my counterpart. After successful completion of training I was appointed and posted as an Assistant Wildlife Officer, South-West Headquarter at Jorethang and Mr. Lachungpa was appointed and posted as Assistant Wildlife Officer North-East Head Quarter at Gangtok in August 1980. Mr. Lachungpa and myself were the pioneer Wildlife Officers



While inspection of NTFP Plantation near Rongcho Kyongnosla in 1999

in Sikkim under separate Directorate of Fish and Wildlife headed by Mr. P.O.Pazo Addl CF-cum Ex-Officio Secretary. Late Shri, W.T.Lucksom was DFO Wildlife and Shri D.S. Basnett was Assistant Wildlife Officer Headquarter in Gangtok. This was the first initiative for taking measures for conservation, protection, and preservation of wildlife in Sikkim under the provision of the Wildlife Protection Act. 1972 which was extended in Sikkim in 1976. In October 1980 I and Mr. Lachungpa were assigned Operation Trap Demolition in North and West Sikkim to apprehend the musk deer poachers. I led expedition team for Operation Musk Deer Trap Demolition in West Sikkim with a contingent comprising of frontline staff, Armed Police, guides from local pastures starting from Yuksom-Bakhim-Tsoka-Pithang-Dzongri, Lakshe Pokhari-Thangsing- Lampokhari-Kasturi Orar-Aralunchok and back to Yuksom. In this expedition we demolished more that 15 km trap, snares laid out by cutting rhododendron

bushes for miles together. Along the musk deer traps we found indiscriminate numbers of Satrya tragopan, Blood pheasant trapped and killed. Usually the musk deer trap is laid out during October to trap the animal during the winter local migration from high altitude to lower areas. After continuous trap demolition operation we could apprehend three musk deer poacher in Khola Orar (rock cave) near Kasturi Orar but arrested only two; one escaped in the thick rhododendron forest. These professional poachers were from Nepal. The offenders were booked under the provision of Wildlife Protection Act.

It is pertinent to emphasize that the season for courtship



Accompanying JICA team for preparatory study for project formulation in Geyzing, West Sikkim.

and mating of this animal also falls during this season and both male and female musk deer moves together covering with ratio of 1:2-3, as a result both are trapped and killed resulting in decrease in population of this rare and threatened animal. The frequent expedition and patrolling from 1980 onwards had tremendous impact on conservation of musk deer including other wildlife resources. This was really one of the exciting and remarkable experiences during my career as a forester I cannot forget. Mr. Arthur Pazo also accompanied us as Video-grapher. Subsequently a Mini Zoo and Deer Park was established at 10th Mile Baguwa on Melli -Nayabazar Road (which presently falls within the Kitam Bird Sanctuary) during 1981-82 as a Rescue centre for displaced and injured animals from the wild and it was one of attractions for the local people and tourists as well. Later on due to constraint of budget it was abandoned, but I strongly felt that this site would be most congenial and ideal site for rescue centre for wildlife and birds species of low altitude which we could develop and promote as one of the Eco-Tourism destinations. Since the inception of Wildlife Wing in the Forest Department, we had lot of impact from 1980 onward for the cause of conservation of wildlife in Sikkim. I was inducted in State Forest Service from 05.07.1980.

In 1982 the Fish & Wildlife Directorate was merged with the Forest Department and late Shri P.S. Moktan (PCCF-Secretary retired) sent me and Mr. Lachungpa for two years' training for State Forest Service (SFS) to Burnihat, Assam. We packed up for SFS training in first week of November, 1983 as departmental candidates. After rigorous two years training in Burnihat we were awarded Diploma in Higher Forestry (now recognized as MSc in Forestry recognized by the deemed university FRI & Colleges, Dehradun).

Consequent upon the successful completion of Higher Forestry training I was posted as ACF Social Forestry West Headquarter at Gyalsing and subsequently posted as ACF Cardamom (MFP) in November 1985 and March 1986 in Gangtok. During the tenure of ACF Cardamom I generated maximum revenue out of the sale of cardamom collected from the leased out cardamom plantations in Reserve Forests and departmental cardamom plantations in Namok-Tinjey and Nim Tar in North and East Sikkim.

In October 1986 I was promoted and posted as DFO Logging and additional in charge Cardamom sub-division and State Guest House. During the tenure as DFO Logging Mr. Arvind Kumar IFS presently Resident Commissioner Sikkim House New Delhi was my ACF in Cardamom Sub-division. I took up the first time mass thinning of plantation throughout the state as silviculture operation for the growth and development of the plantation which is must for height and girth increment of the forestry crop. This was one of the significant steps initiated by me in the department as a part of sound and scientific management system of forestry. If any one goes back to records of revenue generation in Logging and Utilization Division in the department as commercial unit there was substantial increase in revenue and no loss compared to the expenditure for operational expenses.

During the tenure of DFO Logging I had a golden opportunity to undergo training in Forest management and Wood Industries in Swedish Agriculture University in Garpenberg Sweden in July 1989 for five weeks. I had an opportunity to travel extensively in Sweden and Helsinki and Copenhegan capital of Finland and Denmark, on study tour organized by the University. I had lot of exposure and gained technical knowledge for scientific management of Forest. The best thing I learnt was the work ethics, value of time and dignity of labour from the people of Sweden.

In March 1990 I was transferred and posted as DFO (T) East and took over the charge from Shri S.T. Lachungpa the present PCCF-Secretary. Mr. Anil Ganeriwala presently Secretary RMDD was my ACF (T) in Gangtok. I can never



36 years old Dhupi and Champ Plantation at Pelling Created By me as BO Gyalsing

forget the excellent service rendered by late Shri Gyanendra Rai DFO who was my ACF (T) Pakyong. He was a gem and excellent Forest Officer and it was a great loss to the forest department when he passed away accidentally. As a DFO territorial I had to face lots of challenges. Most of the cases and forest offences had to be dealt with great patience and diplomacy. Dealing with Army, BRO and civilians in the capital and surrounding

areas was a tough job and had to be tackled with great care to avoid public prejudices. One thing I experienced was that to be an efficient DFO territorial one must be prompt in disposing the forest offences, committed to work assigned, good team work with frontline staff, soft and cordial to the public and no pending work.

I took over charge of DFO Soil Watch in July 1992. The main task of the Division was treatment of landslides and vulnerable areas with biological and engineering measures in the Rongpu Chu catchments areas. The different work components were implemented by the Watershed Development Committee. Many areas had been treated well but in many areas there was no positive impact due to manifold adverse climatic and manmade factors.

In July 1995 I was transferred and posted as DFO (T) South. During this tenure Tendong and part of Damthang Reserve Forest were declared as Eco-Development Nature Reserve. Damthang has been named as Bio-Diversity Park. Grazing in Reserve Forests was banned during 1995. Harit Kranti Dasak was announced by the SDF Government for greener Sikkim through peoples' participation and many cases of forest offences were dealt to control grazing, illicit felling, movement of timber, etc. for forest protection.

In March 1997 I was posted as DFO Headquarter at Gangtok under suspension due to vigilance case leveled against me along with Mr. K.T. Bhutia, the then DFO and other five Range Officers. This was the black period of my career and life. However we were proved innocent and the Government was pleased to revoke suspension order

in December 1997 and period of suspension was treated as on duty. I emerged strong and committed to have firm conviction that I will dedicate my profession for the cause of protection and conservation of forest and its natural resources.

I was posted as DFO MFP Headquarter in Gangtok in December 1997 during which tenure along with the then CF Working Plan Shri S.B.S Bhaduria we put a proposal to the State Government which was pleased to approve setting up State Medicinal Plants Board (SMPB) in the State in June 2002. It was one of the significant initiatives for ensuring sustainability of medicinal plants and to coordinate all matters pertaining to their development and sustained use through propagation, protection and utilization. Since Sikkim harbors 424 species of medicinal plants 13 Herbal Gardens were created for their ex-situ and in-situ conservation and cultivation in different agro-climatic zones and raising of commercially important species funded by National Medicinal Plants Board (NMPB). I had a longest tenure as DFO MFP from 1997 to 2004. MFP was later on re-designated as NTFP Division. This was the period for revolution for scientific management of medicinal plants resources in the state. Jari Buti Khosh was created for which fund was provided by under State Plan.

In March 2000 I was inducted and appointed into Indian Forest Service (IFS) with a cadre allotment of 1993. In December 2004 I was promoted to the post of Conservator of Forest after 20 long years of service as Divisional Forest Officer and posted as Conservator of Forest Wildlife. Being



Recce for IRF 2010 at Shingba Rhododendron Sanctuary

a wildlife trained officer I had an opportunity to serve in wildlife sector only after 21 years of service in different rank, file and posting. In between I was Conservator Territorial in 2005-06 for a short period and continued as CF Wildlife from 2006 till today with an additional charge of CCF Wildlife. The greatest achievement during the tenure of my service in Wildlife Circle worth mentioning is that all the Wildlife Management Plans have been completed and documented with great effort being rendered by the concerned DFOs of respective Protected Areas. Initiatives were taken up for creation and establishment of Butterfly and Bird Park at Rangrang, North and Rabdentse West Sikkim, The proposals with comprehensive Detailed Project Report (DPR) for Bird Park have been vetted and



Plantation created in 1974 By me as BO Gyalsing

and good administration during my career. I also visited Jurong Bird park Singapore during August 2009 for exposure for achieving concept, architectural design and structure administrative and technical know how for the effective implementation of the project Sidkeong Tulku Bird park at Rabdentse, Gyalsing, West Sikkim. I have been actively involved in organizing International Rhododendron Festival 2010 at Shingba and Barsey Rhododendron Sanctuaries in North and West Sikkim as also actively involved in celebration of closing ceremony of

cleared by the Government. The park has been named as Sidkeong Tulku Bird Park with foundation stone laid down by the Hon'ble Chief Minister on 21.02.2009 coinciding with the Forest Centenary Celebration 1909 to 2009. The work is in active progress. DPR for Butterfly Park is also completed and first phase of work is under progress. I had experienced that being totally new concepts these projects threw up lot of technical difficulties in conceiving the different components of work though the department had engaged the consultancy services. However, the department is making all efforts to combat those problems and now the process of implementation is fast improving.

In between as CF Wildlife I had an opportunity to visit Australia and New Zealand from 31st July to 11th August for Intensive Training Programme "Good Governance" and had lots of exposure in respect of management of manpower Forest Centenary on 7th December 2009.

I will be retiring as CCF elevated from the post of Forester rendering total service of 40 (forty) years 8 (eight months) on 03.02.2010 under the Sikkim Government started from the Chogyal regime to the present popular Government i.e. from June 1969 to February 2010. I have a great zeal and enthusiasm to fulfill my dream living within or outside the Department to complete the most important priority project conceived by the Government like Bird and Butterfly Park, JICA project and IRF 2010 in the state which will not only give a significant contribution for protection, conservation and preservation of flora, fauna and entire bio-diversity of Sikkim Himalayas but also promote, develop and boost Eco-Tourism as alternative livelihood opportunities for the people of Sikkim.





ON THE OCCASION OF SIKKIM FOREST CENTENARY CELEBRATION 2009

It was 30th June 1977, I was appointed as a Wildlife Warden, a very challenging and adventurous profession. It was a desire and destination which I had always dreamt of. It is because I had a strong intrinsic temperament for nature since my good old school days. I used to organise Sunday trekking in the thickest of the forests with a few of my selected school friends and teachers. The memory gives me strength and encouragement throughout my service career.

In 1977, there were limited senior posts of foresters in Sikkim Forest Department. The CCF was the head of the Department and Addl. CCF was the Chief Wildlife Warden. The CWLW post was created as a mandate of the enforcement of Wildlife (Protection) Act 1972 extended throughout the country. There were seven posts of DFO and two posts of CFs. The Wildlife sector had a small organization in the rank of BOs and the ROs to conduct field survey and reconnaissance of wildlife. There was no protected area, except a small patch of Rhododendron Park at Shingbha in North Sikkim over 32 ha.

The Khangchendzonga National Park (KNP) was declared after a rapid reconnaissance of the area under Wildlife (Protection) Act, 1972 over 850 sq km in the year 1977 extending over North and West Districts. The process of declaration of KNP enriched my span of knowledge in wildlife conservation, protection and management.

The poaching, trapping, snaring and hunting practice was of the skilled professionals of the local villagers in Sikkim in various scales and in varied eco-zones of the State. The Musk Deer trappers/poachers came from Nepal, West Bengal and Bhutan also. The musk pad is a CCF Territorial and Land Use & Environment



We were at the Equator - Kenya

highly valued item which attracted the poachers. It was sold at par with gold price in the international market. Sikkim has high fecundity of musk deer population distribution throughout the State. The musk deer



Greetings with Chief of Masai Mara Community Kenya

holds a place between the deer and the antelope. It is hornless, has no facial glands but it has a unique gall bladder which no deer family possesses. The musk gland is situated beneath the skin of the abdomen of the males only. In fresh secretion the gland emits unpleasant odour, very pungent, urinary odour, but once it is dried it acquires the scent of the musk. The musk pod is a valued commercial product and it induces high rate of mortality of the species by way of poaching.

Soon after my appointment as Wildlife Warden, we were directed to conduct 'Operation Musk Deer Trap Demolition (OMDTD) Expedition in Khangchendzonga National Park from two directions i.e. via Tholung, Kishongla-Thepala and another from Sakyong-Tsingnak, Kuthang, Rivongthang, Rithang, Zoupatam-Goechela. Shri Athup Lepcha, Wildlife Warden led the expedition from Tholung and I led the expedition from Sakyong to Goechela along with two AWLWs, one R.O, 32 F.G trainees, one police Havildar and 4 constables with arms and ammunitions. We hired one middle aged Lepcha man from Sakyong the last village, as a guide. He had been to the spot along with Survey of India team in 1952 and had some knowledge about the path/trails of the Goechila from Dzongu. It was the toughest and most difficult terrain any trekker ever thinks of. It was also highly exciting leading a huge uniform cadre team in the midst of dark and deep unexplored forest canopy. It was highly rugged terrain and there were fresh trails of carnivores like leopards, bear and enormous spineless leeches of different colours and sizes. The trail passed through thickets of ground vegetation, slippery soil, obnoxious and often harmful shrubs. The stretches of whiskery and soft touch of leeches from the nearby bough was yet another experience of this arduous

expedition which runs down the memory's spine till today. It was the beginning of month of September; perhaps the last residual torrential rain of the year that bore significant impact through out the expedition. We got completely soaked and had to take this bath day after day. The trail crossed a steep landslide which took the whole day to cover on the river bank of Rukel Chu; often we crossed the rivulets feeding the main drain on a single log bridge. It was a test between life and death. One F.G, Sonam Thargay slipped from the slippery stone on the bank of the river and I rescued him by catching his rucksack saving him from further whirling into the powerful torrent (later I had been informed by other F.G, that S.T. lost his confidence).

After a week's trekking, we reached Kuthang and observed fresh cutting of poles, stretching of single log bridge across the river and presence of inhabitants in that remote village. At first we were surprised to see the human signs and gradually I started investigating their trails and found a cave under a huge boulder in which the poachers lived for probably a month. I asked my AWLW to search around the boulder and found that a bag full of rice, champa (Satu) and animal dried fat in typical Lachungpa bag. We took all eatable items for our use as we had little ration to support further expedition. The trail/trekking route was better as it had been cleared by the poachers; we reached Rivongthang a huge semialpine Rhodo-mixed vegetation zone at around 2:45 PM. I asked the team to pitch the tent and prepare for the night. It was 9th day of the expedition. Most of the team mates were exhausted and tired. I moved along the trail and reached a cave located on the bank of the River in which I found the fresh evidence of poachers. A mug was hung on a Rhododendron cutting in the cave. I touched the fire place and found that the ashes



First record of MISHMI TAKIN Budorcas taxicolor in Sikkim



Tracking leopard trail in agriculture fields at Melli-Kerabari- South sikkim

were slightly warm. Immediately we hid ourselves in and around the boulders and caves and in the thickest of the bushes to attack the poacher on arrival. We waited over two hours under cover, but no one arrived. The fresh trails and paths used by the poachers were tracked by two teams and found that a man had walked in the open alpine meadows and amongst the thicket of bushes of dwarf Rhododendrons. The fresh cuttings of saplings with sharp weapon were noticeable. As we followed the same trail from one direction and another team from the opposite direction, the second party whistled indicating that they saw one poacher in the Rhodo-bush and immediately following him he was arrested and brought before me. The poacher belonged to Lachung and he revealed that there were two more poachers who had gone to reccee the traps spread by them about two months at Rithang near Goechla facing eastern flank. The team had uprooted and unfolded the cable/ropes used for trapping musk deer. They also detected a Himalayan Langur which was killed in the



Proper Silvilculture operation supports natural regeneration in North Sikkim

trap and they skinned the same and kept the untanned trophy for exhibits.

Musk Deer traps: The poachers survey the musk deer habitat and assess their distribution and flushing territory before the traps are constructed. They select the main flushing territory and vintage points and lay traps. They use live Rhododendron cuttings, Sorbus, Maple, and Betula and create a long stretch of fencing across the main habitat of the animal and choose the highly vulnerable location for putting the traps. They use live poles of Viburnum species and Sorbus species as a bow and tie cable/rope on it and make a temporary locking system which on slight touch operates immediately and hangs the prey. The traps were made with high- tech local traditional inputs such that no animals escaped from it. During our expedition we found that even Pheasants like Monal, Tragopan and Blood Pheasant were not spared.



First Roofless enclosure for Cat

We also identified a number of hot springs along Rukel Chu which was extremely hot and entire stretch of river smelt of sulphur. Most of the team members by now were tired and complained of headache, diarrhoea and nausea. The next day, our ration carriers had not reached our camp since two days. We were running short of ration, except rice, turmeric and salt.

I asked the Lepcha guide to collect some wild vegetables to supplement our food stock. The Havildar and AWLW recorded the statement of the poachers and stated that they were there since over three months and had constructed musk deer traps over 50-60 km in staggered layout. He also disclosed the names of the two poachers from Lachung -- one Mr Samba, who happened to be my own maternal uncle and the other Mr Ninden Lachunga cow herder by profession. It was an embarrassing situation for me as my own uncle was one of the poachers. However, we proceeded the next day with the poacher as our guide and he showed us all the traps which we unfolded and uprooted the trap fencing and collected the wire/cable/ropes. We also found that one male musk deer was killed in the trap on the first day and two males the next day near Goecha. The carcasses of the dead animals were skinned and the pods were removed and sealed for exhibits. After removing all the barriers and traps we returned to base camp where our remaining friends had halted. The two poachers found our presence in their den and they ran away from there and were caught at Beh after three days by the Tholung team. We received a call letter from CWLW to report to Gangtok immediately. The next day we returned to Beh and CWLW came to receive us at Mangan around 7 P.M and he took the team leader of Tholung and me to the Chief Conservator of Forests



Crossing Broken cane Bridge - Life & death challenge

(the then Secretary, Shri K.C.Pradhan) and reported at his residence at Development Area at around 11P.M. He greeted us with excitement and commended to us for our successful operation trap demolition mission which was the first in the history of Sikkim Forest Department for arresting dreaded poachers. He saw our pathetic worn out outfits, immediately directed the CWLW Shri P.O Pazo to issue two sets of new uniform to all the team members, we were delighted and encouraged.

The rest course of the expedition, the trappers were booked under Wildlife (Protection) Act 1972 enforced on the state since 1976 and produced before the D.M (N) who sentenced them for 6 months with fine of around Rs.6000 to each poacher.

As soon as they were released from the jail, the Lachung Dzomsa assembly was called by the Pipon and



at Bhojogari School Childre

the poachers were presented before it under Dzomsa system. The Dzomsa drew mutual agreement to restrain the members of the Dzomsa community from further poaching in any forest in future in the State and resolved that anyone indulging in poaching practice would be removed from the Dzomsa and from Lachung village. Their resolution opened scope for switching poaching profession to other better and economical employment to the locals. In fact some of the famous poachers became Government contractors and owners of hotels in Lachung today. Similar operation trap demolition expeditions were carried out in other parts of the State which destroyed extensive length of musk deer traps in the State. This scheme became one of the important mechanisms for management of wildlife in the State. As a result the survival of musk deer and other wildlife received tremendous boost. The sighting of musk deer in this area is now quite common and distribution and availability of the species is on optimum record today throughout the State.

I am very fortunate to be a Wildlifer and have made exceptional and arduous records of demolishing



SIKKIM FORESTRY 100 YEARS OF SERVICE | 61



extensive traps in high altitude areas of the State. My only regret was that I had to arrest my own maternal uncle during the OTD in KNP. He made several attempts on my life but due to love and respect for my late mother, he restrained himself from further attack on me. But time and again he used to threaten me and used to tell me that you are alive because of his beloved sister. Later on he became a successful contractor in his life.

As AWLO I conducted survey and study of ecological, faunal, floral, geomorphic, natural or zoological aspects for the purpose of protecting, propagating and developing wildlife and its habitat at Kyongnosla, Fambonglho and Shingba in north, Maenam in south and Barsay in the West. My last Survey of forest area for declaration of Pangolakha Wildlife Sanctuary in East District was carried out in a joint collaboration with WWF, Sikkim branch in search of one very rare species of Cervus reported in Sikkim, the Sikkim Stag or Shao.' which was feared to have been extinct. During the survey of Pangolakha R.F, we found evidences of distribution of Sikkim stag which required further scientific research.



Training of Turbulent Torrent with Sausage and Spur structures

I also discovered rare and endangered species of Giant Antelope reported but not observed or photographed by anyone till 1996. I encountered the great mammal Takin (*Budorcas taxicolor*) at Menla R. F. in East Sikkim in the year 1996 and photographed it.

I conducted extensive survey of the area and collected adequate information on distribution and availability of floral and faunal resources of the forests and prepared detail report of the area for enabling the permanent wildlife protected areas in the above forests. Initially, there were lots of apprehensions of the surrounding villagers and therefore, I faced difficulty in convincing them. However, I am so happy today that the same villagers have understood the purpose for which the area was declared as Protected Area.

I also received the first National Wildlife Fellowship Award of Shri Kailash Sankhala in the year 1996 to study the secluded Himalayan Tahr (Shapi) in Sikkim.



My study revealed that the Himalayan Tahr found here appears to be sub-species of variety of Himalayan Tahr as it possesses distinct morphology, ecological niche and habitat as compared to the other Himalayan –Tahr found in other Himalayan regions in the world. The famous Tibet explorer Dr. Ernest Schaefer also held the same view. However, more scientific studies with modern technology may confirm the actual genetic variation of the Tahr, in near future.

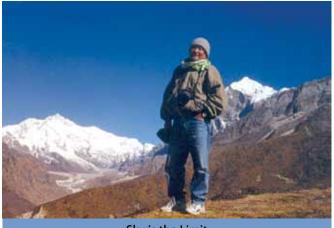
I was promoted to the post of DFO in the year 1986 and posted as DFO, River Valley Project and Soil Watch Division. During the tenure of DFO I organized plantation in Rorachu watershed and the plantations were successfully raised and have survived. The plantation along Namnang, Tathangchen, Chanbari, Bhusuk, Yali, 2nd Mile -10th Mile, JNR. The plantation activities at Kumrek, Rorathang road were fully established and capable control landslide and soil erosion. There is



In search of snow Leopard at Patala-dombang Traet

visible progress of change in the entire landscape and overall improvement of these locations in terms of ecology and environment.

The applications of geo-mats and geo-textiles material were also tried for control, establishment and stabilization of soil erosion and landslide first time in the history of treatment of landslide in Sikkim. The result of



Sky is the Limit

this technology was highly encouraging and applicable in selected soil erosion prone and landslide zones in the state.

As DFO (Wildlife) from 1989-2009 executed the management of wildlife and improved the protected network by developing infrastructures and as the present day DFO informs me that these assets are being utilized today.

Designed and developed Himalayan Zoological Park-Bulbuley on modern zoo concept. The concept of roofless enclosures for Leopard and Lesser Cats were designed first time in the country. This design provided helped the zoo inmates to retain their natural instinct to prey for their food within the enclosure only. In the year 2000, self posted as DFO LU&E (N) and found that the entire administration of the Division was in complete disarray. There was no coordination among other Divisions; the frontline staffs were not accustomed to wear their uniforms. Gradually I enforced the practice of wearing uniform while on duty to only frontline staff of Land Use Division. I also actively coordinated with the other Division in the District and gradually improved the quality of coordination of DFOs on all occasions. As a matter of effective coordination among the DFOs also made the frontline staff practice wearing uniform of other sectors. After one year of my unwavering insistence all the field staff of North District put on their uniform on all occasions. They were rated excellent on many occasions by even Police Officers. This system was later adopted by other Districts also.

The Catchment Area Treatment of Teesta Stage-V was approved by the Government and works were implemented qualitatively. The road between Lower Dzongu and Upper Dzongu at Rongdol slip was frequently disturbed due to landslide and erosion. The implementation of CAT Plan TS-V stabilized the active landslide zone and the problem of road blockage was averted since then. The Central Level Monitoring Committee for Teesta Stage-V recommended the case of implementation of CAT Plan TS-V for Award of Indira Virksha Mitra Award on three consecutive occasions in their monitoring and evaluation report.

I was promoted to the rank of CF in 2005 and posted as C.F (Land Use and Environment) Circle. As CF LU&E, Circle, re-organized the working system of the Circle and brought the Circle into proper administrative order. The additional charge of CCF (LU&E and FCA) was given in the year 2008 and I rendered effective coordination among the user agents and built cordial relations with Boarder Road Organization and also Army as well as



Walking through bouldery forest gives strength to knee joints

civilians for implementation of FCA 1980. At present I am posted as CCF (T) and Land Use & Environment Circle since July 2009.

POSTINGS

Year	Ranks
1977	WLW
1980	AWLW
1986	DFO
2005	CF
2008	CCF

TRAININGS

1979-1980:	Diploma in Wildlife Management, FRI Dehradun		
1982:	Conducted 2nd Expedition to Green Lake, North Sikkim		
1983:	Fur-farming training, USSR		
1983-1985:	Diploma in Higher forestry, Burnihat Assam		
1996:	Land Use Management and Extension, Kenya, Nairobi East Africa		
1996-1997:	Zoo Management and Panda breeding- Marwell Zoological Park, UK		
HIGHLIGHTS			

1996:	Awarded fi	rst Kailash	Shankhala	National
	Wildlife Fell	lowship		
1996:	Received le	adership A	ward from	All India

Soil Conservation Society of India. 1996: Took first photograph of Takin in the history

of Sikkim's wildlife.

Future Action Planning

My passion is environment and wildlife. I have been associated in creating a huge protected area network in the State; more than 30% of geographical area and these areas require proper scientific research base and modern technology to manage our rare and endangered wildlife and their eco-systems.

A large number of hydro electric projects are being planned along the River Teesta and Rangit. The conservation and protection of catchment area of the HEP are accordingly planned in the EMP. However, there is no proper planning to conserve, protect and enhance the water resource down the dam. The downstream is the life line of human settlement, aquatic ecosystem and environmental substance. Therefore, I will work to carry out my mission to restore, improve and enhance the little water/moisture available in the natural drains and foster the contributory tributaries at various stretches.

The fish conservation and protection plans are restricted

only above the dam and there is no proper plan to protect and propagate the aquatic live below the dams. The aquatic ecosystem is not confined only above the project site, but its ecosystem stretch at length and breadth of the entire river ecology.

Therefore, comprehensive planning for aquatic ecology and ecosystem management of the river is an undisputable agenda for each and every one of us when the topic on climate change is discussed at length at various forums of the world. I will endeavour to redress, plan through various organization, scientific institutes, Government department for carrying out the above mission till my superannuation in 2018. After my retirement, I will continue to lead my experience and knowledge for wildlife conservation and protection vis-à-vis environmental protection in the State and subsequently contribute any modest share in making the world a better place and our tomorrows more secure.

[NOTE: Author is presently also holding following charges: Member-Secretary State LU Board & State Environmental Appraisal Authority; Secy State Env. Expert Appraisal Committee; State Coordinator ENVIS Centre; Nodal Officer Catchment Area Treatment Plan, Sikkim]



After a walking in mosaic alpine zone you cross many fresh water lakes

ON THE MUTILATION OF THREE SILVER OAK

Thanks Lord, the tree has grown again I sure know they decapitated the crown The limbs were chopped and thrown Lo! There was silence alone to bemoan.

You looked maimed and lifeless Rid of your vigor and gorgeous dress I was witness to it all along Ashamed and aghast at the wrong To a mute but beauteous being I know not what the humans think.

You sucked the dust and sized the carbon We all breathed clean and green The Lord was seated under the shade Peacefully then all of us prayed Assembled beneath your spreading canopy Prayers fruited to remove human agony.

Crows nested and bred in the branches Courted, played and chased the poachers Everything ceased once the ambience gone Naked stood three silver oaks, ever forlorn Hearts bled on sight of the wounded trees Disrobed bodies exposed to unkind vagaries.

Half dead, still awake, you waged the battle Against all relentless gig and giggle To survive and serve the ailing world

-- T R Poudyal IFS (Retd)

For those who want you cheaply sold To procure a measly monetary pittance An act, that does no way enhance. The tall and towering human claim Of being the highest and supreme Soul and sentinel of this big planet Sans sensitivities and earthy tenet For a protector and benevolent sublime The tree for ever is a symbol divine.

Mankind undoes the great survival efforts The Lord and nature profusely affords In the form of green mantle and garb "Life indeed would be dull and drab" Without the cover of this green raiment Is ever a gift, heritage and an endowment.

To a world seething with lurking fears The hotter earth is a threat, say the seers We cut the root and destroy the fruit Little knowing our own futile pursuit Should we head for a manmade disaster And may lose the planet earth forever.

We better care and stop the plunder And remember to be prudent and wiser Let us be kind and respect the right Of a tree to stand fearlessly upright.

AN ENCOUNTER WITH THE CHOGYAL (My most embarrassing moment)

It was the time when His Excellency the President of India Sarvashri V V Giri was due to visit Sikkim in the year 1970. The Palace was fully engaged in the preparation to make the visit a grand success. He was to fly from Thimpu, the capital of the Kingdom of Bhutan to Gangtok.

The Forest Department was then the key Department, as is now, in the Government looking after many sectors and disciplines not wholly belonging to its ambit. Being one of the oldest and most trusted wings of the Government ably run by competent Officers with a large, trained and regimented manpower base this Department used to be entrusted with the key and core governmental functions and events to be managed, arranged.

Such being the backdrop of the Forest Department in terms of organisatioin and management, naturally the onus of carrying out almost every item of work from food, lodging, beautification, hospitality to erecting welcome gates at vantage points for the VVIP too fell on this Department.

The Palace was the focal point from where every order, instruction or decision used to be conveyed including the planning and execution of activities related to such important events. One of the tasks assigned to the Department was the cooking and catering for the accompanying guests, dignitaries and Officials of His Excellency the President of India. It entailed meticulous planning, orderly execution and extension of highest order of hospitality to the members of the accompanying team.

I was a low level functionary in the Department having joined the Department only a year back at the Bordang Sawmill Complex, near Singatm. As in-charge of the operations

- T R Poudyal, IFS (Retd)

of logging, lumbering and conversion and sale of wood and wood products at the sawmill at Bordang, one fine morning. I received a call from my headquarters at Gangtok that a truck load of firewood was to be delivered to the Palace for cooking and heating purposes. The use of LPG as a cooking medium was unknown then. minuscule job that merits little mention when looked at and talked these days but the dynamics of time prevailing then, perhaps made it so important for me As a fledgling young recruit my limbs tremored when I heard that such a task was to be performed for the Palace. The Palace used to be as distant as the sky for an access for such a low level official and lo! here is a duty for the Palace staring at me. It was a mixture of both elation and a nagging fear -- fear of as great an institution as the Palace. Perhaps the times, the nuances of administration then and the archaic old era of systems and the social norms existing then might have had a combined effect on my psychology.

I picked up the best, finest and the driest of high calorific billets of wood that were available in plenty in my sprawling stacking yard, arranged a Nissan truck, loaded and headed straight towards Gangtok, high in spirit that I will be noticed, noted and perhaps appreciated for a job promptly performed. I was hungry of all of these mentioned ingredients as a young, ambitious Officer to make a mark in the Department in future, as future is where I willed to belong to.As I was so new and naïve to the Palace and its niche, my Head of the Department Shri KC Pradhan who both loved me and lured to work hard for my future, thought that I may bungle. He advised me to be accompanied by Shri Hridaya Chandra Mukhiya, Block Officer then, when in Gangtok, and particularly when I was entering the Palace premises with the truck. Shri Mukhiya was a frequenter to the Palace compound being in-charge of Parks and Gardens wing. Shri Tika Narayan Gurung, another BO too joined on the way to the Palace.

We drove straight to the Palace; all three of us with the truck for unloading. On reaching, I found that there was already excess of supply of firewood and that no more was needed. One of the high Officials present at the Palace looking at the firewood expressed his intent on having that on payment. I sought the approval of the boss who happened to be right there, nearby and descended down the hill taking the famous Dukhit Pan Dokan bifurcation down the Kazi Road

We slided down the road with the truck, which I forgot to mention earlier, was a bit old and shabby -looking with wrinkles of ageing if, I may say so for a motorengine. Hardly had we descended about 300 yards, than a white Land Rover was seen negotiating the climb up towards the Pan Dokan, perhaps heading for the same destination as we just left, the Palace. As I glanced at the vehicle, now just one yard in the front, I saw an octogenarian looking lady sharing the seat near the driver, never bothering who the driver was. The traffic rule mandates that up-coming vehicles be given, as they say, the pass. As the land rover made a screeching halt in front of us, we began to reverse the truck looking suitable space so that the upcoming land rover gets an access. To our surprise, the engine stopped and refused to start. In the mean while, Shri Mukhia had a closer look at the vehicle and found that the driver was no other than the Chogyal (the King, for those of the youngsters who may not know what Chogyal means) himself sitting with the steering. The Chogyal himself was driving without the flag, without either the pilot or the security as used to be the normal practice. Heavens fell, there was darkness around and the senses lost normal functioning for all of us as Mukhiya began to send out distress signals muttering such words : now we will immediately loose our services,(*lah! nokari gayo aba*). The world fell apart for we had just joined the service and were trying to settle down.

We instantly lost our balance, began to try and revive the dead motor of the truck with the help of a handle by inserting it inside the engine from the front and rotating as used to be the practice in those days, an improvised method of inserting life force to make it work. All efforts failed and the engine refused to roar. For full fifteen to twenty minutes all of us were at work to somehow either restart the engine or push back the truck in that narrow road. To our pleasant surprise the Chogyal maintained a dignified silence all along; neither spoke any word or gestured, nor looked annoyed, irritated or angry or even uncomfortable. He kept on looking, all along, the drama being enacted in front of him by a bunch of nervous sentinels who themselves did not know what they were doing as the engine never obeyed them nor was it possible to push it back with about a dozen hands that were available at the spur of the moment.

Fully convinced that the truck will not trace back its steps and that the efforts have gone in vain the Chogyal began to reverse the Rover to follow a different route to reach the Palace. What a tragedy! a king instead of commanding, ordering and putting its entire mite to get the obstacle removed from the spot chose to meekly retrace his own steps nor did he subsequently initiated any action to the wrong doers viz. the three of us. Is it the Buddhist philosophy that impregnated his mind with a sense of compassion and forgiveness? Was he liberal, soft or flexible? I never analysed but the fear of .losing the service on account of this incident continued to hunt me for a long time. Mukhiya, meanwhile, sourced information from the Palace personnel and found that the Chogyal made a light enquiry as to why traffic sentries are not posted at points and spots where traffic congestion was likely to occur.

Now that the march of time has almost erased the force and ferocity of its adverse impact (the fear element) but the incident has remained as one of the drops in the reservoir of my vast memory. Lest I forget to mention, the visit of His Excellency, the President of India could not take place because of adverse weather conditions.

Late N. K. Rai

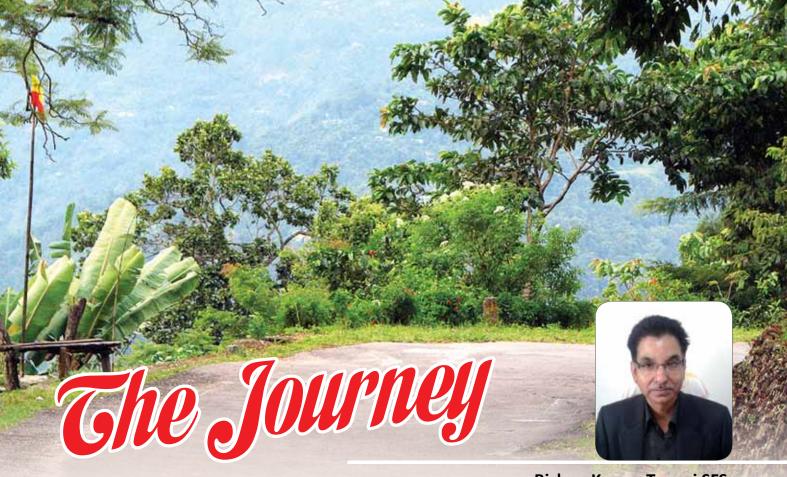
Retd. DFO Parks & Gardens

Shri N K Rai rose from a humble post of a Forester in the Sikkim Forest Department and went on to become one of the most recognized and acknowledged landscape architects of Sikkim and outside. Most of the old Parks and Gardens dotted around the Sikimese land peripheries, like the present Water Garden

near the 32nd mile along Singtam- Gangtok Road including the floral beautification and landscaping along this route is the handiwork of this great artist. The New Delhi Agri- Expo exhibition pavilion, 1977 which he designed and decorated at Pragati Maidan was judged the best in the country and bagged the Gold Medal.

A highly dedicated and involved Officer, he used to become emotionally attached with the welfare of the floral vegetation and used to virtually cry to see the damage caused to any tree or natural pockets of beauty and serenity by human hand and feet. He was attached for some time with the Kew Garden in England to learn more about landscaping and gardening which he successfully applied later on in his profession in Sikkim. The Cabinet has approved the proposal of the Department to name the present Water Garden as N K RAI WATER GARDEN. Hopefully the Department will translate soon this Government decision into practical action by officially inaugurating it any time now.





was born on 12th November 1953 in Samdur Village is East Sikkim and joined Ranipul Primary School in March 1960. I remember that while burning the slash collected before cultivation of maize crop in our private land partial damage was done on the road reserve for which we were fined Rs. 265/- by the Block Officer, Ranipul in 1964. I was in class IV that time. My father was a law abiding person. He gave me the money and I paid the fine to the Block Officer and obtained a receipt. I passed class VI from the same school in 1966 and took Admission in class VII in Tashi Namgyal Higher Secondary School in the year 1967 after passing the qualifying examination. I chose Bio-Science stream in Class IX and passed Higher Secondary Examination of West Bengal Board of Secondary Education in 1972 securing Second Division and was among the 16 lucky students who passed the examination out of 248 appearing candidates. After passing the H.S.Examination I was selected for MBBS by the Darbar Administration and got admitted in B.S.Medical College, West Bengal in 1972 but discontinued after a year due to personal reasons..

In July 1975 I appeared for examination for the post of Block Officer (then called Forester). The exam was tough and physical endurance test even tougher. We had to run 38 km in two hours. Starting from the GICI or Government Institute of Cottage Industries at Zero Point, Gangtok, we had to reach Chawang (near Phodong) in the allotted time. Although there were 106 candidates, only 12 of us completed the endurance test which I will never forget throughout my life. After the viva voce test, I was the only candidate to clear all three subjects viz. Maths, G.K. and English. Mr. Maniram Rai (present DFO, Land Use North) was No.2. Six

Bishnu Kumar Tewari SFS, Additional Director of Forests

of us were appointed as Foresters on 22nd July 1975 with Basic Pay of Rs. 200/- (Two hundred) and I was posted as B.O. Station, Geyzing. Shri H.P.Pradhan (present CCF-Wildlife) was the Block Officer, Geyzing. We raised the plantation of Cryptomeria japonica (Dhupi) at Pelling which has today grown into thick forest. On 1st October 1975 along with other colleagues I went for one-year Forester's training in West Bengal Forest School, Dowhill, Kurseong. The training was mostly through field trips which was exciting and adventurous and I passed it securing 1st position with Honours Certificate.

After my training, I joined as Block Officer Working Plan. Shri T.R. Sharma (Retired PCCF-cum-Secretary) was my ACF. We carried out enumeration of Sal Forests between Jorethang and Melli. Thereafter I went for two-year Ranger's Training at Eastern Forest Rangers' College, Kurseong in April 1977, passed it with 1st position securing Honours Certificate and was posted as Range Officer, Working Plan from May 1979 to September 1981. Shri P.K.Yonzon and I were the two Range Officers with Shri Binod Yonzon (present DFO, West), Late Daulat Yonzon and Shri B.K.Basnet (present DFO. Parks and Gardens) and Shri Dorjee Tamang, presently Assistant Conservator of Forests (ACF), FCA, Namchi, as Block Officers. We carried out enumeration of the forests of Ravangla Range from Ravangla to Sada and from Kaluk to Chewabhanjyang in West District from May 1979 to October 1981. I prepared the first Centrally Sponsored Project on Integrated Wasteland Development of Kalejchu Watershed in 1981. I was deputed for two years' post graduate diploma in Forestry (MSc. Forestry) in State Forest Service College, Burnihat (Guwahati) Assam joining the institute on 9th November 1981 on which date I was appointed to State Forest Service.

M.Sc. in Forestry in Passing October 1983 I re-joined my Department, getting posted as ACF Wildlife, South-West Division with headquarters at Jorethang from November 1983 to March 1986. I attended 15 days International Training sponsored by Wildlife Institute of India at Kanha National Park, Jabalpur (Madhya Pradesh) on "Wild Animal Immobilization and Capture Techniques". I was then posted as ACF Wood Working Centre from March 1986 to March 1989. In March 1989, I was posted as ACF (Territorial) Soreng till March 1992. The plantations raised under my tenure as ACF, Soreng at Okhrey, Burikhop and the Bamboo Plantation at Malabasey have grown up successfully. We had the opportunity to do an adventurous trek to Chewabhanjyang, Singalila and Torifuley bordering Nepal in August 1991 from Uttarey.

In 1992 after promotion to the post of Divisional Forest Officer (DFO) I was posted as DFO, Social Forestry, South Division and helped my other colleagues in preparing several centrally sponsored schemes in the district and all the projects were approved by the Government of India. In May 1994 on transfer to Gangtok as DFO Integrated Wastelands Development Project which was in its last final year, we considered the large number of people employed in the project and decided it was necessary to revise and extend the project for further five years. We carried out a detailed study of the treatment area and with the help of project staff the leftover watersheds were taken up under the project. After a tiresome exercise of around 20 days in the field, a DPR for treatment of these watersheds was prepared and sent to the Ministry of Environment and Forests (MoEF) which sanctioned it in March 1997.

In April 1997 I was transferred as DFO (Planning) cum Technical Assistant to PCCF-cum-Secretary in the Head Office. When State Forest Service (SFS) Cadre was reviewed in 1996 I was promoted to post of Joint Director of Forests in October 2003. I attended training of Biosphere Reserve Managers at Wildlife Institute of India, Dehradun and Nanda Devi Biosphere Reserve in Uttaranchal in April-May 2000 and also one weeks' training sponsored by Ministry of DONER on "Project Planning, Evaluation and Management" in Indian Institute of Management, Calcutta in May 2003. I had the opportunity to attend one month training on Planning and Management of Externally Aided Projects under AUSAID in Australia in November-December 2000 which experience was unforgettable. I was promoted to the post of Additional Director of Forests in October 2006.

The best part of my career was when I was posted as ACF (Territorial) Soreng. All my colleagues in the sub-division were extremely cooperative and ready to help under any circumstance. I enjoyed serving the people. Most of my then colleagues are now holding higher posts and some of them have since retired. I have till date served as Technical Assistant to five PCCFcum Secretaries viz. Shri P.K.Basnet, Shri T.R.Sharma, Shri T.R.Poudyal, D.B.Shrestha and my present PCCF Shri S.T.Lachungpa. I believe that I have been able to deliver good service under all of them. I was given the additional charge to look after the Administrative Section in February 2009 and am doing my best to streamline the cell.

The other sectors of which I have been given charge are Parks and Gardens at Gangtok and the surrounding areas, River Valley Projects, Engineering Cell, Implementation of Tribal Sub-Plan and Scheduled Caste Sub-Plan, Stores and Publicity. Presently there are three Joint Directors, four DFOs, one Deputy Director, two Under Secretaries, eight ACFs, and ten Range Officers working with me.

I feel lucky to be working for the cause of environment. During my entire career of more than 34 years there were bitter moments also which I try to forget remembering only the good which I was able to deliver for the department and the people at large. I am one of the luckiest foresters serving in the Department when this Department completes 100 years of service to the people and is celebrating the Forest Centenary Year in 2009.

First in Sikkim's Forest History

Judgement on Criminal Case No 81/80: relating to 1st case of Apprehension of Foreign National Poachers from Khangchenchendzonga National Park and Conviction in Court of Law



NOMBI TSHERING BHUTIA DFO (KNP/KBR & WL/N)

It was a prime case detected and apprehended in the state. When posted as Assistant Wildlife Warden KNP at Yuksam in 1980 I was first informed regarding presence of notorious poachers within Khangchendzonga National Park by Shri Sinki Tempa Bhutia of Yuksam on 23rd Sept'80. After verifying the report I left for Gangtok and informed the Chief Conservator of Forest who was also the Chief Wildlife Warden. A team headed by Shri H.P. Pradhan presently CCF Wildlife, but then Assistant Wildlife Officer of Wildlife along with me, Forest guards and six constables

from the Sikkim Armed Police was sent to apprehend the poachers on 30th Sept'80. We set out from Yuksam on 2nd Oct'80 and travelled via Dzongri, Pokharital to Thangsing where the teams were divided into two for combing the area and trapping the poachers. On 5th Oct'80 one group led by Shri H.P. Pradhan descended from Balavdhunga to Kasturiorar, while the second group led by me travelled towards Dolokpa. All along the routes the teams went about demolishing traps set by the poacher. Just below Surkhetdara my team detected one of the poachers who ran after seeing the armed party. It was only at Dovephaku cave, our team was able to apprehend Tshering Sherpa-II and

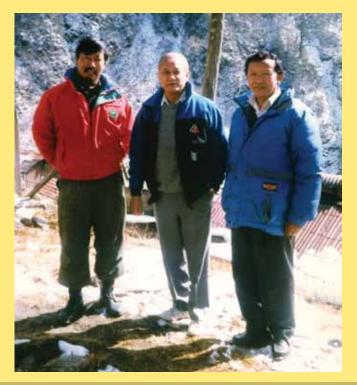
sometime later Temba Sherpa. At the cave's side where the poachers had camped the team found some remains of Blood Pheasant and some utensils belonging to the poachers. Sometime later poacher Tshering Sherpa-I was also arrested while he was returning to the camp after inspecting trap lines. After their arrest the team demolished the live traps set by them all along the base of the mountains. It transpired that these poachers could have come from Nepal for Musk Deer poaching without any permits for entry into Sikkim. They entered into this Himalaya via Kalimpong where all the arrangements for the expedition were made. These accused persons had travelled from Kalimpong via





Melli, Jorthang, Legship and Tashiding to Dolokpa. They put the Musk Deer traps from Dolokpa itself and killed and eaten seven Blood Pheasants. My team succeeded in apprehending all the notorious poachers except Dorjee Sherpa who managed to escape.

After reaching Gyalsing West Sikkim these accused persons were charge-sheeted under Section 51 (c) of the Wild Life (Protection) Act 1972 in the court of District Magistrate West Sikkim for prosecution. The case took seven months for the final hearing. On 5th March 1981, the District Magistrate West was pleased to pass the final Judgement Order. Under Section 14 of the Foreigner's Act all the three accused persons were convicted for a period of one month and there after deported from Sikkim for violating Section 14 of the Foreigner's Act.





My Friends Late Lhakpa Ts. Lachungpa and Late Karma Ts. Lepcha

This was the first ever conviction under the WL (P) Act, 1972 in the State of Sikkim and is documented here to bring to the notice of the new generation of foresters and wildlifers that in the discharge of duty comes the sweet satisfaction of success and great scope for adventure in the mighty Himalayas, our home and sacred landscape.



Batch of 1983-85 & 1984-86, EFRC, Kurseong



Hon'ble Minister Thinley Ts. Bhutia in our group during Rangers' Training, EFRC, Kurseong

TEN MINUTES TO GREENERY



T. R. Poudyal, Retd. IFS

"Man, despite his artistic pretensions, his sophistication and many accomplishments, owes the fact of his existence to a 15-cm laver of top soil and the fact that it rains", so wrote, an earth scientist, whose full name I am yet to come across. Irrespective of the fact whether the name has the face or not the quotation reminds us of our relationship with the soil and the therefore the

land, a components of environment. "Forests precede civilization, deserts follow them," another quote goes.

Hundred years earlier, forests served economic functions. A hundred years later, they are the life anchor of humankind. We no longer like forests as serving for timber of charcoal, furniture or fodder but as a security blanket for our existence, our survival. The earth is disguiet, chaotic and many times demonstrates its anger through natural disasters of great magnitude. The slow, imperceptible, yet devastating canker of global warming is at our doorstep, threatening our very existence. The balance and order which naturally existed has, due to human overexploitation of resources, been disrupted to a magnitude whereby we stand to lose the great good earth if not cared for an attended to in time. The earth scientists aver that unless profoundly tangible actions and agenda are not initiated immediately it is heading for a man-made disaster.

The mid-July memorandum of the Sikkim Government, therefore, deserves a special place and a mention against the backdrop of one and a half decade of sustained environmental movement that the state is pursuing. Ranging from protecting the existing natural forests to enriching the available land with young seedlings for the future progeny has been the constant focus of the government. The concept is to intensity the stir to plant, care and establish the tree crop so that Sikkim is ecologically sustainable conducive for a host of development inputs. The hills and the Himalayas are what sustain the rich plains and plateaus in terms of agriculture and irrigation, in the prevention of soil erosion and floods. Retention of a sizeable forest cover in the hills is to the benefit of both this state and the neighboring plain areas.

Environmentalism in Sikkim has taken deep roots. It has reached what we call the grass root. The widest crosssection of people assembling to participate to plant a seedling to the '10-minute to greenery' programme on that rainless Wednesday morning was a testimony to our concern for the deteriorating environmental fabric elsewhere which we hear and stoically bear. It was no less than a pageantry of planters running for and rummaging every nook and corner for a small pit to plant that lovely looking sapling in their hands. Awareness, that say is fifty percent conservation. This mass people-based programme, outside the traditional forte of the Department of Forest, Environment & Wildlife Management, amounts to a paradigm change of concept, content and criteria and makes the whole forest regeneration approach a different, down-toearth proposition.

This is not the single thrust that the government has pushed through in the direction of environmental conservation. Others have preceded and paid off tangible results. The 2006 'Green Mission', the flagship umbrella cover of the '10-minute to greenery' programme gave us the roadside greenery that dots and decorates our arterial roads and landscapes, the grazing ban in the forests has reinvigorated the health and hygiene of our vegetation so much so that the forest fringe-dwellers have to share their agricultural crops with the wild denizens now – a success and sad story woven together. Only two-three days earlier a widely circulated vernacular paper featured the story of farmers in West Sikkim facing this interesting dilemma. Out streams and stream-lets are carrying more water with them now than ever before. The discharge is more; the volume is high and the velocity vigorous.

The 'ten minutes to greenery' is a timely response to the imperative of connecting ourselves to the fabric of nature rather than alienating, however advanced and sophisticated we may be. It is a great turning point in the life and times of all of us to look towards nature; to return to her what actually belonged to her - the tree. A moment to look around and imagine what life would be without the ubiquitous tree, if that word correctly fits in to convey the sense. The noblest of acts in the service of humanity is undoubtedly to plant a seedling. All religions, philosophies, percepts and practices never denigrate tree culture but offer paean to its glory.

The hills need more tree cover than

the plains-more than 60% to be specific. We are on our way up The Forest Survey of India records an increasing trend for Sikkim. Over the last decade and a half as much as 2% forest cover has increased, thanks to the Government, the people and the Department for the policy focus, cooperation and the spirit of conservation by each one in that order. We need more to do to fill up the blanks and wastelands. roadsides and stream banks. High density forest coverage needs to be raised to guard our glaciers from depleting faster, for our rivers to rise and roar perpetually. The 'ten minute to greenery' is a concept to unite people to jointly raise plantations for the state, for their surrounds and for the sake of the society.

This innovative approach, the 'ten minutes to greenery' is a tool, a mechanism and a medium to reach to the goal of making Sikkim more beautiful, environmentally stable and ecologically secure. It is an offshoot of the 2006 Green Mission umbrella that is in continuum. It is an expression of resolve. pledge and the determination. It is an intension, a will and a commitment towards greener Sikkim. It also is one of the pages of the green blueprint for Sikkim. It is a declaration of joint willpower to combat pollution and climate change. It is yet another step to make the future of coming generation free of the encumbrances of an unhealthy, polluted environment.

For, the famous philosopher artist, John Ruskin wrote:

"God has lent us the earth for our life. It is a great entail. It belongs as much to those who are to come after us as to us and we have not right by anything we do or neglect, to involve them in any unnecessary penalties, or to deprive them of the befnegits which was in our power to bequeath."





Friendship

B. K. Tiwari SFS Addl. Director

I was born as a seedling, you as a baby You were fed and nurtured by mother I was fed by nature and nurtured by rain and sun You grew up as a teenager and I grew up as sapling I had to remain in a place but you were able to play and run Your tender hands sometimes touched me <u>unknowingly</u>.

As you grew up I grew up too My leaves were beautiful I felt you admired me Everyday you passed by you touched me I was so happy that I smiled in flowers Since we were born on the same day I felt you recognized me I had met my friend but you were unaware In this way we met every day You were growing up so did I It became a habit of mine to see you day after day But one day you did not come I was so upset but consoled myself I shed my leaves to bloom again Hoping you will come the next day And admire my beautiful flowers It was dawn again and the sun moved up slowly But you did not come I waited and waited and grew up as a tree I always thought that one day we will meet The year passed and so the decade The cool breeze of the winter made me shiver The hot weather of summer made me tear The rain gave me strength and vigour And the autumn made me whisper I was now grown up and able to fruit The deer and rabbit eat my fruit to dance The monkeys jump upon my branches to chatter

And in my youthful days I felt my life was of purpose For the well being of man and the likes One day I saw someone coming to me He came and stopped near me He looked upon me for quite some time I recognized him so did he We were childhood friends I smiled in flowers and dropped one for him He had become a forester The best friend of my life.

TSOMGO LAKE AND EFFORTS MADE ON ITS CONSERVATION

B.B. Gurung SFS DFO (T)

Tsomgo Lake is located at an altitude of 12400 feet from MSL and 38 km away from Gangtok in East District of Sikkim. This serene and beautiful high altitude lake is considered as a sacred lake by the local inhabitants. For years together, this lake had remained undisturbed due to its remoteness and poor accessibility. However, from early 60's road construction for defence purposes and other forms of human activities in the area has gradually started affecting the lake environment. Local people mainly yak and cattle herders were visiting the areas. From late 80's, the inflow of visitors both local and from outside the state increased in number.

A few local people from 1988-89 started small business like selling of tea and other eatable items to the visitors in the vicinity of Tsomgo lake area by erecting umbrella sheds. Slowly and gradually the number of visitors and tourists in the areas increased and tea stalls under umbrella shed were converted into small shops which rose upto 52 numbers till the date of shifting from the areas to shopping complex below Tsomgo Lake.

Ever since the area was opened up for tourism, the tourist traffic has been growing at an alarming rate. Nearly 400 vehicles ply daily during the peak season carrying 10 passengers per vehicle on an average. While this is a good indication for State's economy, the future consequences due to deterioration and degradation of the environment and the scenic beauty may not only cause environmental problems but could also adversely affect the tourism industry.

The hordes of tourists and other local's visiting the area each day has changed the landscape of the lake with temporary shops and structures on the lake side made out of bamboo matting, tar drums, scrap GCI sheets etc. Such structures had distorted the aesthetic look of the lake environment. The sacred lake started receiving garbage and dirty slurry of human wastes, oil spills from vehicles, littering of the areas from shops, tea stalls, and





waste water from kitchens and by visitors. There were 30 shops before 1998 in the lake areas.

There is a constant threat to lake environment due to unregulated human activities and pack animals, pollution of lake water, gradual siltation due to construction activities, pollution from plying vehicles mainly noise, smoke and oil spills, deforestation in the nearby areas as the people used to keep themselves warm during night by burning firewood in the hearth (Bhukaris), grazing by cattle and pack animals and littering of surrounding by yak dung as yak riding is common in the lake areas as it is a tourist hub.

There are hosts of other NGOs who worked on the conservation of Tsomgo Lake like Green Circle of Gangtok who have put their best efforts in creating awareness among the tourists and other visitors. The said NGO has put up many sign boards with information details about the lake. Similarly, the Tourism Department has also tried to create awareness among the tourists and people visiting the area. Under the Wetland Conservation programme, the Land Use & Environment Circle of the Forest Department, JFMCs and EDCs have also taken up conservation and protection activities of the lake. However, continuous inflow of tourist and biotic activities, the protection of lake, its flora and fauna is under constant threat. The siltation of the lake is a major problem. No doubt that this lake has provided livelihood of thousands of people living along the JN Road from tourism activities. However, development should go hand in hand with conservation of nature and environment.

Keeping all these points in mind during 1997, the State Forest Department in consultation with the Tourism Department, Government of Sikkim moved a proposal for eco tourism and conservation programme of lake with following objectives to preserve, protect and conserve the lake environment on a sustainable basis for conservation of Tsomgo Lake.

- Shifting the existing huts/shops from the Lake Site and area below the lake.
- To relocate the car parking facilities below the lake near the proposed shop areas.
- Creating and providing yak and pony on the downward slope of the lake
- Providing pay and use toilet facilities near the shops and parking areas.
- Providing garbage disposal bins and signboards with environmental message around the lake area.
- Development of parks and gardens etc.

The proposal for diversion of 1.465 ha of Reserve Forest land below the lake was sent to the Ministry of Environment and Forests, Government of India, Eastern Regional Office, Bhubaneswar under section 2 of the Forest (Conservation) Act, 1980 on 30.3.1998 for the above mentioned purpose. The Ministry conveyed its formal approval for use of 1.465 ha of forest land vides No. 12-89/FCE/5239 dated 20.11.1998. However, it took almost 10 years to complete the project for parking and shopping areas below the lake. The Forest Department constantly requested to Tourism Department to complete the construction and shift the shops from the Lake site.

Further, during 1999, the Government had constituted a Tsomgo Lake Management Committee with Additional Secretary, Tourism as Chairman, Divisional Forest Officer (T), Forest Department as Chief Executive Officer and Joint Secretary / Dy. Secretary, Urban Development and Housing Department and other local people as members of the committee to manage all the facilities as well as the maintenance and upkeep of Tsomgo Lake vide Notification No. 150 (8) 98/TD/6942 dated 5th April 1999. This committee also played a vital role in conservation and protection of Lake Environment.

While the construction of Shopping Complex was completed by 2007 but shifting again took almost a year. Meanwhile on 31.7.2006, Major role was played by the Forest Department Government of Sikkim and was also assisted by NGOs like WWF-I and TMI. A policy was drafted and a notification was brought out for conservation of Tsomgo lake in partnership with Gram Panchayats and Tsomgo Pokhri Sanrakshan Samiti (TPSS). The TPSS was formed on 24.05.2007 at a Gram Shabha held at Tsomgo under the guidance of Forest department and WWF-I. Committee was constituted, consisting of following members.

1. Shri Chewang Norbu Bhutia	President	
2. Shri Bikash Rai	Vice President	
3. Shri Gnawang Gyltsen Bhutia	Gen.Secretary	
4. Shri Tamding Dopthapa	Joint Secretary	
5. Smt. Phurba Doma Bhutia	Deputy Secretary	
6. Shri B.B.Moktan	Treasurer	
7. Shri Dawa Norbu Bhutia	Vice- Treasurer.	

The TPSS was then registered in the office of the Divisional Forest Officer (T) East at PS Road Gangtok on 31.12.2007. A temporary office of the TPSS was inaugurated on 1st April 2008 at Chipso village near Tsomgo with launching of entry ticket of Rs. 10/-(Rupees ten) only to be collected from every tourist and visitors entering the area.

The TPSS also played a vital role in removing the shops from lake side. The TPSS and Forest Department faced a lot of criticism in the initial stage even from the Government Department also. Till 31st March 2009 the TPSS collected a sum of Rs. 25,76,564.00 as entry fee from the tourists and visitors. 50% of the collection is being utilized by the TPSS for conservation and protection of the lake as per the approved conservation plan. During 2008-09 a sum of Rs. 5, 19,600.00 was sanctioned for Tsomgo lake conservation works namely desiltation program, sign boards, lake cleaning drive, construction of garbage collection pits, dustbins for shops etc. Besides this the TPSS has been actively working and helping the tourists during accidents, road mishaps and provides shelter to stranded tourists during road blockade.

Today the TPSS has given employment to four local persons from the TPSS share (50%) fund, one Office Secretary, one Ticket Seller and two Lake Guards.

The new shopping complex below the lakes has been allotted to shopkeepers who vacated their shops from Lake Site. The shifting was done after issuing repeated reminders to the shopkeepers for shifting of shops by Forest Department followed by Tourism Department. Finally by the end of June 2008, the shopkeepers shifted the shops down to shopping complex leaving a huge quantity of garbage in and around the lake.

TPSS along with the state Forest Department organized a cleaning drive in collaboration with WWF India and SKES by removing garbage from the area using volunteers and taking all garbage by truck to garbage dumping yard at Martam below National Highway which is about 65 km from Tsomgo Lake. Since then TPSS has been playing a vital role in the lake conservation.

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Photo credits: B.B. Gurung DFO (T), WWF- India, Sanjit Nandi.



SIKKIM FORESTRY 100 YEARS OF SERVICE 1 77



Wild Biodiversity of Raj Bhawan Complex, Gangtok

Usha Lachungpa Sr. Research Officer (WL)



Indian Redl Admirals on Berginia ciliata

'Raj Bhawan', a name steeped in history for most and in mystery for the common man, an exclusive area secluded from the daily hustle and bustle of life. Not many are privy to this part of Gangtok, hidden away behind a forested screen from the main road. Earlier known as the Residency, a legacy left behind by Sikkim's first Political Officer John Claude White, built after 1889, the area was renowned for its lawns and gardens and its European architecture like bay windows and typical furniture. The famed Residency gardens still includes a trailing Wisteria with its blue showers of flowers planted by White himself 120 years ago, at the entrance of Raj Bhawan, as

reminisced by our own forestergardener Mr. K. C. Pradhan. Later European occupants had introduced bulbous flowers like Daffodils and Narcissus. Today the area still has well tended lawns and gardens with seasonal flowers and hybrid orchids as well as many species of trees like Rhododendrons and Magnolias.

Many hidden treasures are lost to mankind simply because the general populace is not aware of their presence and hence not able to appreciate the need for their conservation. This is an attempt to bring this hidden treasure to the notice of the layman and add to the eco-tourism initiatives of the Government of Sikkim, besides



Spangle caterpillar on Citrus highlighting the role of gardeners, foresters and the general public in safeguarding this important piece of Sikkim's heritage. The diversity of life forms in Gangtok's Raj Bhawan Complex is to be seen to be believed. The entire Complex, spread over an area of almost 10 hectares at an altitude of about 1800m is contiguous at its upper end and to its east with Ganeshtok-Pinetumcum-Smritivan and the Himalayan Zoological Park at Bulbuley which links further up with the Ratey Chu Reserve Forest (RF) almost all the way to the Cho La Range bordering the Chumbi Valley. At its lower end and to its west it links up the last green lung of Gangtok, the Forest Colony at Balwakhani, going further down to the Rani Khola (River) separating it from the bird-rich Fambong Lho Wildlife Sanctuary (WLS). It thus forms a vital part of the forested Oxygen-Bank and more importantly, Water-Bank on which depends the very survival of the state capital, Gangtok.

FLORAL DIVERSITY includes various species of native and exotic trees like Oaks, Chestnuts, Himalayan Alder, Rhododendrons, Magnolias, Michelias, Cryptomeria japonica, Japanese Cherry Prunus cerasoides; shrubs like the paper-yielding Edgeworthia gardneri with its attractive blossoms hanging in small yellow bunches, a magnet for various bird species; the thorny Rubus bushes with tasty yellow berries, and the un-edible red and vellow varieties of the exotic Night Queen or 'Raat-Raani' Cestrum shrubs with their white and red berries respectively. So also the many varieties of attractive ferns including the large primitive Tree-Fern and fern-allies like Selaginella, and Lycopodium Eauisetum greening the edges and untended nooks of the Complex. Many of the large old Engelhardtia spicata trees with their long inflorescences and winged seeds can be seen festooned with varieties of epiphytes like the orchids Pleione, Dendrobium, the red-flowered Agapetes serpens, climbers like Rhapidophora, the itchy Mucuna, large and small ferns, mosses and lichens. Bamboo



Selaginella, a Fern Ally

diversity can be seen in species like Sinarundinaria intermedia, Sinarundinaria hookeriana and Dendrocalamus hamiltoni Many exotic shrubs have also established well in this complex over the century, providing valuable shelter to small birds and animals. The ground flora consists of varieties of grasses and herbs including some valuable medicinal plants like Artemesia vulgaris and Astilbe rivularis. Many seasonal flowering plants like Calendulas, Petunias, Asters, Marigolds, Primulas, Sweet Peas, Lilies, Roses, Hybrid Orchids and Zentedesia are lovingly maintained by the Raj Bhawan Gardeners, providing splashes of colour on the lawns, while the heady scent of the large flowered *Michelia doltsopa* trees flavour the air delicately. A rare annual treat is the *Rhododendron arboreum* in flower, its blood-red blossoms lighting up this lovely tree, truly an incandescent gift of nature.

FAUNAL DIVERSITY includes a variety of small mammals, birds, reptiles, amphibians, butterflies, moths, beetles, dragonflies and many other insects. In fact the entire complex is part of an Important Bird Area or IBA which encompasses the Gangtok Ratey Chu Reserve township. Forest, Bulbuley and the Fambong Lho Wildlife Sanctuary. The most commonly seen animal is the brown Himalayan Squirrel Dremomys *lokriah*. The occasional Large Palm Civet Paguma larvata locally called 'Kala' can be seen clambering on the Engelhardtia trees. Yellow-throated Martens or 'Malsapro' have also been seen here as are the smaller weasels ('Nyauri Musa') which chase after small birds and mice. The most magnificent however are the rarer Flying Squirrels *Petaurista* magnificus locally called 'Rajpankhi'. **Occasionally some Barking Deer and** Jackal also stray into the fringes of the Complex from surrounding forested areas or can be heard during dawn or nights.

The most easily sighted wildlife however are the large numbers of birds seen and heard within the Complex and surrounding areas. The earliest to call at around



Spangled Drongo



Non-poisonous Tracheschium guentheri

4.30 am are at least four species of owls including the Himalayan Wood Owl, Collared Scops Owl, Jungle and Barred Owlets. These silent predators keep the Complex clear of rats and mice providing a valuable but free service. As the sky lightens, the Raj Bhawan wakes to a dawn chorus of birdsong. The Great Barbet or 'Nyaul', Green-backed Tit or 'Chichinkotey', the blue-green Verditer Flycatcher or 'Hareni', the White-throated Fantail, various Laughingthrushes, Scimitar Babblers. Red-tailed and Blue-winged Minlas, Whiskered Yuhina, Rufous Sibia, Himalayan Treepie, Tree Sparrows, iridescent Sunbirds are but some of the glamorous birdlife. At least 10 species of Cuckoos, a parasitic species of bird that lays its eggs in other birds' nests, can be heard in the spring season here. Some are easy to recognize by their distinct calls such as the Large Hawk-Cuckoo calling "Brain-fever, Brain-fever" In February-March, incessantly. one can hear Bar-headed Geese and other waterbirds flying overhead in the dark, on return migration to their northern breeding grounds across the mighty Himalayas. Their calls in flight give them the local name 'Karang-Kurung'.

As the day brightens and warms up, the manicured flower beds, lawns and other areas of the Complex attract varieties of butterflies and bees. Commonest among these are the Indian Tortoiseshell, Indian Red Admiral, Himalavan and Common Jesters which breed on Stinging Nettle shrubs or 'Sisnu'. Golden, Azure and Purple Sapphire butterflies fly like living iewels, giving little indication that their life cycles depend utterly on underground dwelling ants, while the Common Five-Ring and other brown coloured butterflies prefer the more shaded bamboo brakes and grassy patches. You can see the sun-loving Tortoiseshell, a very territorial butterfly chasing away the much larger Swallowtails like Red Helen and Spangle from their basking areas. A sighting of the red and blue dragonflies and goldengreen damselflies are a sure sign



Frog - Amolops marmoratus

that the nearby water sources are clean and fresh. These 'tigers of the air' are a wonderful biological control for mosquitoes in summer. The diversity of web-weaving, ground dwelling and ant-mimicking spiders, another of nature's marvels and silent predators of pesky flies and mosquitoes, is astonishing. This area is also good for various species of beetles, bugs, praying mantises like Stick-Insects, Moths, Grasshoppers and Crickets.

Occasionally in the vegetation you might be lucky to spot a Japalura lizard like a miniature green dinosaur or a shiny Skink chasing after insects. Other reptiles known to occur but seldom seen in the complex are Rat Snakes, Himalayan Pit Vipers and Cobras. One may also find the harmless but beautiful Glass Snake or Glass Lizard Ophiosaurus gracilis gracing the area its back shining an electric blue pattern. These beautiful but shy creatures also provide silent yeoman service mankind. Smaller snakes to like Trachesium auentherii form valuable food for birds such as the Blue Whistling Thrush which is perhaps Raj Bhawan's best songster. The most familiar amphibians in the complex are the Himalayan Bullfrog Paa leibigii, Himalayan Toad Bufo himalayana, and some species of tree-frogs; the latter's 'tic-tic-tic' calls providing nightlong orchestras during monsoon breeding season. The entire complex is strategically located such that one can get grand panoramic views of the mighty Khangchendzonga Range, India's highest and the world's third highest mountain peak, but more importantly, Sikkim's Guardian Deity. This, combined with the fresh clean air, calm serenity and soothing weather makes the Gangtok Raj Bhawan Complex a perfectly hidden paradise worthy of all the care and love lavished on its maintenance. It is indeed a treasure and pride of Sikkim.



Neoscona, a harmless spider