

# FOREST KHAWVEL



Pic: Lalhminghlua Bawitlung

## EF&CC MINISTER HOVIN SENIOR OFFICERS' MEETING NEIH A NI

EF&CC Minister Pu TJ Lalnuntluanga hovin August ni 8, 2019 khan PCCF Conference Hall-ah Senior Officers' meeting neih a ni a, he hunah hian Minister chuan thu sawiin, "Tih dan ngai ringawt zui lova hmasawnna kawng thar kan ngaihtuah thin a tul a ni" a ti. Central lama funding source hrang hrang te zir chianga budget pawn lam atanga sum hai luh dan kawng dap thin turin department officer te a chah bawk.

Meeting hi Pu CHM Rao IFS, PCCF in a kaihruai a, Forest Division hrang hrang a DFO theuh te'n an hlawhtlinna, hmachhawp leh harsatna an tawh te powerpoint presentation hmaning an entir a, sawi hona leh rawtna tha tak tak siam a ni.



## FROM EDITOR'S DESK

Mithiamte chhut dan tlanglawnah chuan khawvel hi kum tluklehdingawn 4.6 vela upa a ni. Hei hi kum 46 angah lo ngai dawn ta ila, he leiah hian mihringte hi darkar 4 vel chauh kan la awm ang a lo ni ang a, Industrial Revolution ropui tak kha minute 1 kalta khan a lo intan ve chauh tihna a ni bawk ang. Hemi hun chhung vek hian khawvela ramngaw awm zawng zawng zatve kan thiat hman tihna a lo ni bawk ang!!

A chunga mi khi mihring te'n khawvel kan enkawl dan chu a ni. Mizoram bik chauh hi scientist te hian min chhut chhuah sak ta se khawvel pumpui chawhrual ai khian kan ramngaw te hi kan enkawl tha zawk ang nge kan ti chereu nasa zawk ang?

Beng sika ngaihtuah a ngai e. In sangmar ila, ramngaw leh nungchate humhalhin Zoram nuam i siam ang u.

Ka lawm e.

PC Laltanpuia  
Editor  
email - efextension16@gmail.com

He hunah hian All India Forest Sports Meet - 2019 neih zawh taka medal la tute lawmpuina leh chawimawina hun hman nghal a ni bawk. A hnuia mite hi lawmman la tute an ni.

S N	Name	Category	Position/ Medal	Incentives
1	C. Vanlalruata, F/G & H.Lalrinawmi, LDC	Table Tennis (Mixed doubles)	1st (Gold)	Rs. 10,000 each + Certificate
2	V.L. Zamlova, Dy. Ranger	Shot put (Sr. Veteran)	2nd (Silver)	Rs. 5,000 + Certificate
3	J.H. Lalhariani, LDC	Carrom (Open singles)	2nd (Silver)	Rs. 5,000 + Certificate
4	J.H. Lalhariani, LDC & Vanlalmawia, F/G	Carrom (Mixed doubles)	2nd (Silver)	Rs. 5,000 each + Certificate
5	Laltanpuia, F/G	Badminton (Open singles)	2nd (Silver)	Rs. 5,000 + Certificate
6	C. Vanlalruata, F/G	Table Tennis (Open singles)	3rd (Bronze)	Rs. 3,000 + Certificate



## PRINCIPAL SECRETARY, EF & CC TAMDIL TLAWH LEH WETLAND CHUNG CHANG

- Rongura Hrahsel ACF

Ni 10, August, 2019 Inrinni khan Pu Ajai Saxena IFS, Principal Secretary, Environment, Forests & Climate Change Department, Government of Mizoram chuan Tamdil a tlawh a. Pu Rongura Hrahsel, Assistant Conservator of Forests, Aizawl Forest Division, Pu J Lal-

sawta Range Officer, Saitual leh a staff ten an tawiawm. Tamdil hi Mizoram a kan Dil neih zing a a lian ber dawttu, lar leh hmun hma tlawh hlawh tak a nih avang leh Supreme Court leh

Govt. of India pawhin a ngaih pawimawh em em Scheme pakhat, 'National Plan for Conservation of Aquatic ecosystem' (NPCA) hnuai a Tamdil enkawlna hna Aizawl Forest Division, EF & CC in Annual Plan of Operation ang a thawh te Pu Ajai hian a en a. Hmalakna hrang hrang te tha a tih



Tamdil - Nung tinrengte nunna hnar



Pu Ajai, Principal. Secy in Sava thla a la

viau laiin tun dinhmun a department thenkhat te leh a tlawhtu mipui ten Tamdil kan sawngbawl danah siam that ngai leh hmasawnna tur erawh a tam thu a sawi.

### **Wetland hi enge ni? Ramsar Convention hriat zau nan....**

Khuanu duan Dil leh Tuitling hmun, kum tluan in emaw, hun bi nei a tuijn a chim thin hmun hi 'Wetland' tih a ni a. Wetland te hi mithiamten a pawimawh leh tangkai zia an hre tam deuh deuh a. Kum 1971 khan Khawvel huap Sawrkar hrang hrang ten Dil awmsa humhah leh enkawl that thu-ah Inremna (Treaty) chu Iran Khawpui pakhat Ramsar-ah an lo nei tawh a, Ramsar



Pr. Secy in Tamdil Water hyacinth hnawksak thu a sawi fiah

Convention tih a ni. India sawrkar erawh chuan kum 1981 khan a zawm chauh a. Tunah hian Khawvel ram 170 zetin he inremnaah hian hming an ziak tawh a ni.

He convention thu chhuak zul zui a khawvel ram hrang hrangin hma an lak ang in India sawrkar pawhin scheme hrang hrang hmangin hma a la ve a. Supreme Court of India thupek angin India ram chhung a Dil/Tuihmun (Wetland) awm zawng zawng te chu Indian Space Research Organisation (ISRO) hmangin Dil (Wetland) Nuaihnih chuang zet hmuhchhuah niin, chung enkawl dan duang tur chuan state tin te hmalak tir a ni. Heng Dil hmuh chhuah leh enkawl mek tam tak zingah hian Tamdil hi chu a te ber a ni awm e.

### **Enge Wetland tangkaina?**

Heng Dil/Tuitling hmun (Natural Lake) te hi Mihring, Nungcha, tui leh khawmuala cheng chi zawng zawng leh Ramhmul te tan an pawimawh em em a. Boruak

tha, Tuihna, Chaw chi hrang hrang, nung tinrengin kan mamawh an thawk chhuak mek a. Sawi tur tam tak awm mahse a tawi zawng in 'Engkim tan nunna hnar' a ni e.



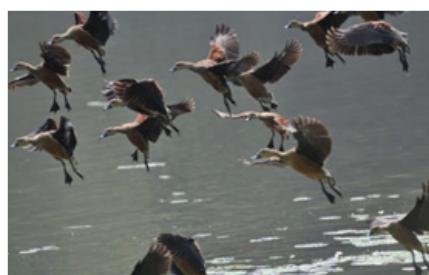
Tuihawkin Chirh leh tiau a chhek lut



Tamdil chhehvel ramngaw siamthat te

### **Wetland - EF & CC Department hmalak meknate**

Dil leh Tuihmun awmchhun ten ram leh nung tinreng tana an hnathawh ropui tak avang hian India sawrkar pawhin humhalh leh enkawl hnaah nasa takin hma a la ve a. Ministry of EF & CC hnuiah '**National Plan for Conservation of Aquatic ecosystem'** scheme hmang hian EF & CC Departement, Mizoram chuan Tamdil humhalh, cheibawl leh enkawl hna hi a thawk mek a. A chhehvel ramngaw siamthat leh humhalh te, Ramsa/Luisa venhim te, Dil hnawkhhat tur tuihawken tiau lei luang lut tur dan te, hnim hnawk chi hrang hrang thenfai te, Chhehvel ram kang tur ven te, Thingtiak siam chhuah leh phun belh te, Dil leh a chhehvel a mihring siam chawp bawlhhlawh chi hrang hrang thenfai hna te, Dil chhehvel leilung luangral tur ven te a ni a. Heng bakah hian Dil tlawh tute thil zirhona tur



Tamdil Lesser Whistling teal

Interpretation Centre leh eisiamna chokate, vantlang intiarna te leh chawlhbuk te, infiamna pool te, dil lenvahna Pedal Fibre Boat te dah a ni bawk. Tamdil leh a chhehvel thil (Biodi-

versity) zir duh leh en duh te tan zan riak pawh a thlen theihna ruahman a ni.



Dil a Chirh leh Tiau te khawl hmang a pah thin a ni.

### **Heng hi ngaihtuah a ngai e**

Tamdil hi a enkawl dan, sawngbawl leh hman danah sawrkar deppa te pawh kan tum dan a in khuangrual chiah lo deuhin a lang a. Tamdil hmu duh leh tlawhtute pawhin Dil (Wetland) pawimawhna leh a hlutna kan la chhut thiam tawk lo deuh in a lang bawk. Engpawh nise tun khawvel dinhmunah hian Dil/Tuihmun te hian hlutna sang tak a neiin hun rei zawk dahi tur a theihtawp chhuah a humhalh cheibawl leh enkawl a ngai takzet. A mawina, a hlutna, a tangkaina kan chen mek laiin, thianghlim zawk, mawi zawk leh dairei zawk - keini ram chhung mai ni lo, ram pawn lam mite tan pawh a tlawh tlaka kan enkawl a ngai a. Uluk leh awmze



Dil tlawh tute bawlhhlawh pah chhar fai hna a hautak

nei taka enkawl a nih loh chuan kan chen ral thuai dawn a ni. An hlutna hre lek lovin an thawh chhuah (Resources) a chen in kan chen a. An mawina par kan

tlan rualin kan ti bawlhhlawh a. Kumtin a kan Dil tui a kam tial tial te hi kan ngaihtuah thleng lem lo. Kan harhchhuah thuai loh chuan kan Dil neih chhun te hian min kang char san ngei dawn a ni.

Hawh u, kan Dil neihchhun te hi an tangkai zia hriain rei tak daih turin uluk leh dimdawih takin i enkawl ang u.



Tamdil Forest Interpretation Centre

### **GREEN BVT**

- K Lalremruata,  
Bethlehem Vengthlang

Ni 2.6.2019 (Pathianni) tlai khan Bethlehem Vengthlangah tunlai khawvel lum zel tur lo do lettu tur pawl

pakhat GREEN BVT chu din a ni a. He pawl hian veng chhung hmun hrang hrangah, a rem channa hmun hmunah thingphun a tum dawn a ni. A hmasa ber atan YMA Day 2019 khan thingphunin ruah sur hnuiah thing tiak 40 vel phun a ni.

A thawh hnihna atan ni 29.6.2019 (Inrinni) khan Chite lui kamah thing tiak 70 vel zet phun leh a ni a. Tin, a thawh thumna atan ni 6.7.2019 (MHIP Day) khan thing 70 phun leh a ni bawk.

A kar lakah hian zan lamah te hnatlangin thing tiak phun thin a ni bawk a, a vaiin thing tiak 200 vel kan phun a ni. Hetia GREEN BVT member te hnatlangho ei leh in tur hi vengchhung mi inphal te hnen atangin cheng singkhat chuang dawn a ni a, a lawm hle mai. Favang hun lo inherchhuakah hian leitha nen heng kan thingphunte hi enkawl zui leh kan tum a, kan intuak chawp nasa ve hle. GREEN BVT member te kan phurin nuam kan ti hle a ni.

Hetianga chhun leh zana hnatlang kan neih hian mi 20 atanga 30 kan thawk chhuak thin a ni.

## AMAZON RAMNGAW KANG UI ZIA LAN-TIR NAN THING PHUN

August thla a Amazon ramngaw nasa taka a kang pawi an tih zia leh an uizia lantir nan Govt. Middle School-I, Lungdai a zirtirtute leh Class-VIII zirlai te chuan ni 23.8.2019 khan thing tiak engemaw zat an phun. Hetiang ramngaw hlutna hria a tihtakzeta vei chunga an phak tawka hma an lo la hi an fakawm takzet a ni. Khawvel lum zel leh sik leh sa inthlak danglam nasa lutuk tih ziaawm nan leh ven nan Thingphun aia tha hi mithiamte pawhin an la hmuchhuak chuanglo nia!!



## RAMNGAW LEH NUNGCHA HUMHALHNA DAN BAWHCHHE TUTE MANCHHUAH KAWNJA TANPUI TUTE LAWMMAN PEK THEIH AN NI TA.

Mizoram sawrkar chuan ramngaw leh nungcha humhalhna dan bawhchhia a pawikhawih tute engemaw ti kawng tala hrem an nih theihna tura hriattirtu leh kawhhmuhtute bakah chumi kawnga mahni tha leh zung senga hma latu leh tanpuitute hnena lawmman pawisa fai pek theihna tur ruahmanna (scheme) a siam fel ta a, a hmingah '**The Mizoram Rewards for Detection fo Forest and Wildlife Offence Scheme, 2019**' tih a ni.

He ruahmanna hnuia lawmman dawng thei turt leh theilo turt leh a hnuia mi ang hi a ni.

### Lawmman dawng thei turt:

1. Mi tupawh, dan bawhchhetu man (arrest) emaw, court-a thiamloh chantir emaw, lei chawitir emaw, ramngaw dehchhuah thil leh nungcha/ramsa leh an taksa peng, phalna nei lova lak te emaw leh chutiang dan bawhchhiat nana hman - hriamhrei, hmanrua leh bungrua te mansak/ chhuhsak an nih theih nana hriattirtu (hemi hnuah chuan hriattirtu tiin sawi thin a ni tawh ang) chu he scheme hnuia lawmman hi pek theih a ni ang.
2. Mi tupawh, dan bawhchhiatna hmuhchhuah leh dan bawhchhetu man kawngah emaw, rawmngaw dehchhuah thil emaw, ngungcha/ ramsa leh an taksa peng bakah dan bawhchhiat nana hman hriamhrei, ralthuum, hmanrua, lirthei, adt. chhuhsak (seize) kawnga tanpuitu leh tha leh zung senga hmalatu hnenah he scheme hnuia lawmman hi pek theih a ni bawk ang; amawherawhchu, dan bawhchhetu emaw thil mansakte kha thuneitu dik tak hnenah thlen a ni ngei tur a ni.
3. Dan bawhchhetu emaw thil mansak te, thuneitu dik tak hnena thlen ngei chungchang thil te chu ngaih-pawimawh bik a ni ang.

### Lawmman dawng theilo turt:

1. Mi tupawh, dan bawhchhiatna hmuhchhuah a nih theih nan emaw dan bawhchhetu man a nih theih nan leh bungrua/ thil mansak a nih theih nana hriattirtu emaw tanpuitu emaw tha leh zung senga hmalatu chu thilsual tihnaa inhnamhnawih ve a nih chuan he scheme hnuia lawmman hi pek theih a ni lovang.
2. Mizoram sawrkar hnuia thawk, dan bawhchhiatna hmuh chhuah a nih theih nan emaw, dan bawhchhetu man anih theih nan leh bungrua/ thil mansak a nih theih nana hriattirtu emaw tha leh zung senga hmalatu chu, sorkar hna a thawhna kawnga a mawphuhrhna hlenchhuak a nih avangin he scheme hnuia lawmman hi pek theih a ni lovang.

Dan bawhchhiatna chungchang hriattir (report) dan te, lawmman dil leh bawhzui dan turte a kimchanga hre duh chuan mahni bialtu DFO/RO/Field Staff te zawh chian theih reng an ni. Lawmman hi a case azirin Rs 1000/- atanga Rs Rs. 20,000/- tleng pek theih a ni.

## KUM 2019 CHHUNG A MIZORAM A RUL-NGAN BU LEH A TUI KEU DAN ZIRCHIANNA

-Dr. HT Lalremsanga, Department of Zoology  
Mizoram University

### Rulngan chu eng Rul ber hi nge?:

Mizoin Rulngan kan tih te hi King Cobra niin, a scientific name chu *Ophiophagus hannah* tih a ni a. King cobra hi khawvel hriat a zir chiang leh a scientific name phuah hmasabertu chu, Danish naturalist, TE Cantor a ni a. Kum 1836 khan Kolkata khawpui bul leh Sundarbans ramhnuai atanga an man te atanga zir chian hmasak ber an ni. King cobra te hi India ram khawthlang, Western Ghats atang a Asia chhimchhak ram hrang hrang thlenga inzar pharhin, an chenna hmun hi a zauh tham em avangin an pianhmang leh rawngah pawh inanglo tak tak a tam hle a ni. Mithiamte'n hmun hrang hrang atanga an zir chiannaah chuan King cobra hi complex species niin species enge maw zat awmin an hria a ni. Hemi lam uluk leh nasa taka zir chiang mektu, P Gowri Shankar (IISc, Bangalore) chuan Museum leh ramhnuai hmun hrang hrang atanga a zir chin tawh atangin India hmarchhak, Myanmar, South China, Bangladesh leh Sundarbans ami te hi chu inang khat vek, King cobra ziding pangngai an niin a hre nghe nghe a ni.

Rulngan (King cobra) te hi khawvel a rul tur nei zinga lian leh sei thei ber niin, hnathelro hmanga bu chhep a veng thin awmchhun an ni nghe nghe. Khawvel rul zingah chuan zir nasat ber te zing ami niin, a bu chhep leh khawsak dan atang hian rul fing tak a ni tih a hriat theih awm e.

### An intlah hun leh Bu chheh hun:

Rulngan te hi a tlangpuiin March – April velah a nu leh pa te hi intlah tanin, a pui hian a tui te hi ni 50 atang 59 vel paiin, April atanga July vel thlengin bu hi an chhep thin a. Mizoram a Rulngan nu te hian a tlangpuiin hmun awih tlan, mau leh rua awmna hmun, tuihawkin a hawrh phak si lovah an taksa hmangin hnathelro huikhawmin bu an chhep thin a, a pui pakhat hian vawkhatah tui 12 atanga 51 thleng a bu chhungah hian a nei thin a ni. A bu chhunga a tui te hi hnathelro chhah tha tak hual chhunga an awm avangin pawnlam sik leh sa in a nghawng buai ngai meuhlo. A bu chhung hi a tlangpuiin 26°C - 30°C ni thinin boruak hnawn lam hi 72% - 80% te a ni thin, hei hi a tui keu nan a duhthusam niin hemi aia a vawh lutuk emaw a lum utuk emaw a chhung boruak hi a ro lutuk emaw a hnawn lutuk chuan an keu thei ngailo thin. A tui atanga ni 51 atanga 79 chhungin a note te

hi an keu thin tlangpui.

Rulngan pui hi a tui leh note tan a inpe zo em em a, a bu chhep zawk hnu hian ramsa dang lakah a bu chhunga a tuite vengin a note lo keu chhuah hma chu tibauit a awm loh chuan a bu chung leh a velah hian a tap chawt mai thin. A note te an bu chhung (egg chamber) a an lo keu chhuah a an chet nghawr vela tang hian a pui hian an keu tan tih hriain a insaseng san ta thin a ni. A bu chhehna hmun hi tui awmna atang a hla vak lovah a ni zel thin bawk. Tin, a bu chhehna hmun hi tuifinriat zawl atanga teh a hmun sang lemlo tak a nih thin laiin tun hnaiah erawh hi chuan, hmun zo lam deuh, 1000 m chung lamah te pawh hmuu tur a awm ta fo mai. Hei hi kan khawvel boruak lo lum ta zel (climate change) in a nghawng te pawh a ni mahna.



Fig.1: Rulngan nu in a bu a venglai

### Mizoram chhung bik a zirchianna:

Mizoram hmun hrang hrang a Rulngan bu te hi kum 10 liam ta (2009 atanga 2019) chhung khan bu 34 vel zet chu Mizoram pawnlam a researcher-te leh thiante nen tlawhin zirchianna kan lo nei tawh thin a. Tun hma a kan pi leh pute'n, "**Rulngan bu chu a nu in a bu chungah inkualin alo veng thin a, a pa in a bul thingkung/mau/raw lerah alo veng ve thin bawk a ni**" ti a an lo sawi thin ang hi heng kan hmuu tawh chinah hian vawi khat mah a pa hi kan la hmu ngailo a ni. Tin, rulngan bu awp an kawlh thin lutuk anga sawi pawh hi a takah chuan alo ni chiah lo a, rul ti tak niin, a bu kan tlawh tawh reng rengah hian duh ang a an thla lak hman harsa khawpin an insaseng thuai thin a ni. Heta kan zirchian tawhte chungchang hi article 2 lai saptawng chanchinbu ah kan tichhuak tawh nghe nghe a ni. Tun bikah hi chuan kumin, kum 2019 chhung a kan zirchian bik ho lo tarlang ila. Hemi kum chhung hian a khawtual mite ngenna avangin Rulngan bu 3 (Mutthi, Samlukhai leh Chhingchhip ram) ami te tlawh an ni a. A bu chhung a a tui awmte Developmental Biology and Herpetology Lab., Department of Zoology, Mizoram University ah ti keuin, a note te hi

hmun him zawk ramhnuiah chhuah zalen an ni leh thin a ni.

S.N	Khua	Rulngan bu tlawh ni	Tui awmzat	Note keuzat	Tui dah zat (Note keu lo)
1.	Mutthi	6.07.2019	25	9	16
2.	Samlukhai	28.07.2019	21	20	1
3.	Chhingchhip	24.08.2019	30	25	5

### A bu chhung awm dan:

Sawi tawh ang khan rulngan bu hi a chhehna bul vel a hnahthelro ho chheh vum hmanga siam a ni a, Mizoram ang tlangramah chuan hmun awiah an chheh thin avangin a bu tharlam a puiin a delh bel/muk tak tak hma chuan a thlanglam atanga tehin 4 ft lai a sang niin a chhaklam atanga teh chuan 2 ft te an ni ve thin, a bu awh chin hawlh tlangin 3 ft atanga 4.5 ft te a ni thin bawk. Rulngan bu hi hmun 3 ah then theih niin, chungte chu:- **(1) Surface layer:** Hei hi a bu chunglam niin ruah thli leh ni sa lak a a tui awmna venghimtu ber niin a muk tha hle thin, **(2) Mid Layer:** Hei hi a bu hnuailam sir leh chhung lam niin surface layer ang em emin a muk ve ngai lemlo a ni, **(3) Nest chamber:** Hei hi a tui awmkhawmna niin, a bu chhung chunglamah awm thinin him tha leh uluk tak a siam a ni thin.

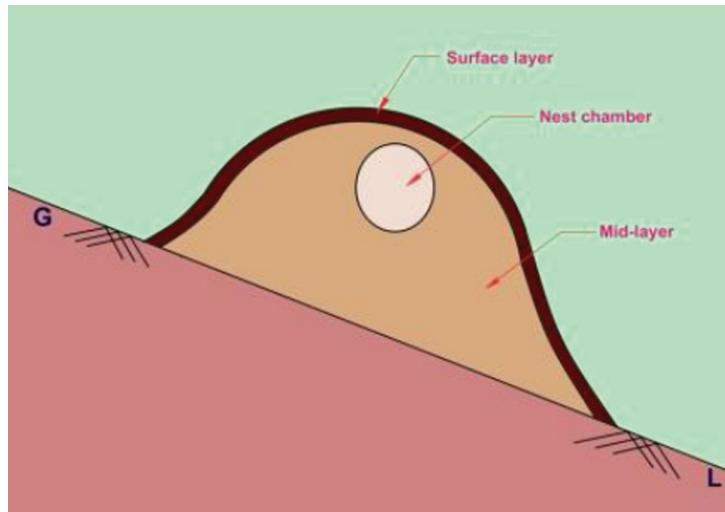


Fig.2: Rulngan bu awmdan

### Rulngan note keu hlim awmdan:

Rulngan tui te hi an zavaiin an keu hlawhtling vek kher ngailo a, kumin (2019) a kan rulngan tui ho zirchianna atang khian a hriat theih awm e. Rulngan bu pakhat a a tui zawng zawngte an keu hlawhtlin vek lohna chhan chu a nu tui hi a pa chiin a belhbawm loh (unfertilized) avang tein leh a bu chhung a a tuite hi an awmna him tha tawk viau thin mahse, fanghmir, tlumpi leh hmuar (fungal infection) te'n an lo eichhiat ve thin vang te pawh a ni awm e. Rulngan tui te hi an keu alo hun tawh chuan a note a tui chhung a awm khan, Pathiani'n a lo duanlawk sak, a ka reh hmawrlam

a ha (egg tooth) hmangin a tui kawr rawn seh pawpin, an rawn chhuahna tur thler (slit) a rawn siam a. Hetih a kawr a rawn seh pawh hnu hian he a ha hmatawng (egg tooth) hi bal/thlawnin, ni khat chhung vel chu a nghawng achin chunglam zawng chu a tuihawng a seh pawh atang hian pawnlam boruak hipin an rawn dak chhuak ta thin a ni. Hetih hunlai hian an lai hrui leh a tui chhungmu (yolk) la inzawmin chaw atan an la ring thin a. Ni khat vel hnuah he a tui chhungmu a a chaw rin hi a zawh veleh a tui chhung atang hian an rawn tlengchhuak ta thin a ni. Rulngan tui, a bu pakhat ami vek te pawh hi ni khatah an keu rual vek ngailo a, kar khat dawn lai tein an keu hun hi a inthlau ve thei a ni. Chuvang chuan Rulngan no keu lai kimchang tak a zir tur chuan zan engemaw zat tlaivar a vil char char an ngai thin.



Fig.3: Rulngan bu @Chhingchhip

A lem a kan hmuu ang hian Rulngan note te hi rawng dum lam niin an lu leh taksa dungluanin a vang za-wngin rawng eng dal lamin chhah lemlo takin a tial chhuak rak thin a ni. He a rawng tialtu hi an upat dan a zirin zawi zawiin a reh ve tial tial thin. Mizoram a kan zirchian tawhah chuan a note keu chhuak hlim te hi 45 cm atang a 60 cm inkar an ni tlangpui thin. A bu chhung (Nest chamber) a a note te an keu chhuah hnu hian ni rei vaklo la cham bangin, zawi zawiin an bu a tang hian ramhnuai a an nun bultan chho turin an chhuak darh ta thin a ni. Ramhnuiah hian anmahni ti na leh tihlum theitu nungcha dang, hmelma tam tak an neih ve avangin dam khawchhuahna hun tha an nei tlem ve thin hle a ni.

### Rulngan Humhalhna Dan:

Rulngan te hi khawvel nungcha khawsakna a inbuktawk a inrelbawlna (Ecological balance) ah an pawimawh em avangin leh anmahni hi mihringin kan tihhlm nasat bakah an chenna leh khawsakna hmun te tihhhiat leh tih chereu a nih tak zel avangin, International Union for Nature Conservation (IUCN) chuan **Vulnerable Category** (Khawvel a rem vek thei dinhmun a,



Fig.4: Rulngan note keu lai video camera nen urhsun tak a zirchian lai  
(Developmental Biology & Herpetology Lab., Dept. of Zoology, Mizoram University)

dinhmun dertawng) ah a dah tawh a ni. Kan ram, India ram bikah pawh The Wildlife (Protection) Act 1972 chuan Schedule II-ah dahin, he dan bawhchhia a Rulngan tih lumtu chu kum 6 thleng jail tan theihna a ni.

Tin, rulngan te hi rul dang ei chi an ni a, heng kan ram a rul tur hlauhawm pai, Khuavangrul (Black krait), Chawnglei/Thiangsir (Banded krait), Rultuha (Spotted-tailed green pit viper), adt. suattu ber an ni a. Mihring tan a hnawksaklo tak an ni a, a hlau mi chu awm theih nimahse, tihhlmum tum kher hian vanduaina a thlen phah chawk thin. Tunhma atanga kan chhui chianin Rulnganin hian mihring an bei hmasa ngailo a, an



Fig.5: Rulngan bu zirchianna (Chhingchhip ram, Hualtu Road)

insaseng hram hram thin zawk. Rulngan mihring a chukhlum tak hi sawitur an la tlem hle, a chukhlum tak kan hriatte pawh hi tihhlmum tum a ngaihdan mawl tak, rulchuk hawlo ni a inngai tlat chung a nel sual tute an lo ni deuh zel. South India ram hmun thenkatah te phei chuan mi in an huan lo ramah rulngan a awm tih an hriat chuan intihtheih nan tak an hmang tawh zawk thin. Chuvangin mi sawi mai mai a innghat lovin, belchian dawl zawkin kan ram a nungcha leh thlaite hi an tangkaina leh pawimawhna ngun lehzualin i zirchiang zel teh ang u khai.

## INDIA RAMA SAKEI DINHMUN ZIR CHIANNA REPORT-2018

June ni 29, 2019 khan International Tiger Day denchen in Prime Minister Narendra Modi chuan All India Tiger Estimation vawi li (4) na '**All India Tiger Estimation Report- 2018**' chu Lok Kalyan Marg, New Delhi-ah a tlangzarh.

Kum 2006 atang khan All India Tiger Estimation hi kum li danah neih thin a ni a, report atanga a lan danin Sakei awm zat hian pun lam a pan zel a, kum 2006 khan sakei 1411 an awm laiin kum 2018-ah chuan sakei 2967 an awm hman a, kum 12 chhungin India rama sakei awm te a letin a pung hman a. Khawvel puma sakei za zela 70 chu India ramah hian an awm a ni.

Prime minister chuan Kum 2006-a sakei awm zat leta tam kum 2022-a neih tum kum 2018 a tih hlawhtlin a ni chu lawmawm a tih thu leh ram chhunga sakei awmte ven him nana thawk zawng zawngte chu fakin India ram chu sakei awmna atana hmun him ber a nih thu leh sawrkarin heng sakeite humhim nan hian theihtawp a chhuah thu a sawi a, kum nga chhungin India ramah Protected Areas chu 692 atanga 860 chuanga a pun chhoh thu a sawi bawk.

Report atanga a lan danin Madhya Pradesh-ah sakei te hi tam berin 526 (kum 2014 ah 308) an awm a, Karnataka leh Uttarakhand state in dawtin Sakei 524 leh 442 heng state-ah te hian an awm a ni. Hetih lai mek hian North East leh Chattisgarh te an dinhmun a tha lo hle a, Chhattisgarh hian sakei awm zat chu a zatve aia tamin a tlahniam a (kum 2014 ah 46, kum 2018 ah 19). Mizoram leh Northern West Bengal-ah te Sakei hnu hma hmuh tur a awm lova, North East bikah sakei chenna ram ngaw chu 9901 sq km atangin 3312 sq km laiah a tla hniat bawk a ni. Buxa Tiger Reserve (West Bengal), Palamau Tiger Reserve (Jharkhand) leh Dampa Tiger Reserve (Mizoram) ah te hian tun zirchian hun (assessment) chhung hian Sakei hmuh tur an awm lo.

All India Tiger Estimation report hi khawvela Wildlife Survey lian ber leh huamzau ber a nih rin a ni a, report lak nan hian ramngaw 3,81,400 sq km a zau zir chian a ni a, Camera trap 27,000 dawn lai hmun hrang hrang 141 ah dah a ni a, heng camera trap hian 121,337 sq

km a zau ramngaw huamin thla vaibelchhe 3.48 vel an la a, chung zing a 77,000 chu sakei thlalak an ni.

## INDIA TIGER ESTIMATION 2018



### ELECTRIC PAWT RU HREMNA THING TIAK 50 PHUN TURIN TI

Delhi High Court chuan mi pakhat, electric pawt ru chu a hremna atan thlakhat chhungin thing tiak, kum thum leh a chanve aia naupang lo, feet 6 aia hniamlo sawmnga phun turin thupek a siam. Thing tiak phun tur hi Deputy Conservator of Forest (west) in ngaih-tuahin ruahmanna a lo siampui ang a, Central Ridge Reserved Forests, Budha Jayanti Park, Vandemataram way leh hmun dang remchang laiah te a phun ang.

Thing phun hma (before) leh phun hnu (after) thlalak a awm ngei tur a ni a, DCF hian lo enpuuin kawng a lo kawhhmuh ang a, phun zawh atanga kar 6 hnuah court-ah report a pe bawk ang.

An hrem thiam angreng mange!!



### VALENTINA ELANGBAM – MANIPUR GREEN AMBASSADOR THAR CHU

Manipur hmeichhe naupang kum 9 mi lek Valentina Elangbam Devi chu a thingphun an kih avanga a tap lai video social media-a a dark chiam hnuah, Manipur Chief Minister Biren Shigh chuan CM's Green Manipur Mission-a Green Ambassador atan a ruat.

Valentina Elangbam Devi hi Manipur state Kakching District-a Hiyanglam Makha Leikai khuua cheng a ni a, Amutombi Devine Life School, Hiyanglam Wabagi-ah class 5 a zir mek a ni.

Pawl khat a zir lain a pain thing tiak 20 lai a pek chu phunin, heng a thingphun atang hian Gulmohar (April par) kung pahnih chiah an dam chhuak a ni. Heng

thing kungte hi kawng zauh a ngaih avangin kih thluk an ni a, Valentina hian thingkung kih thluk te hi a hmuh chuan lung chhe takin a tap ta a ni.

Valentina chuan thingte chu naupangte a nih laia a phun a nih avang leh thangchho ho an nih avangin a ngainat thu leh a unaute ang maia a ngaih thu a sawi a ni. Thingtiak dang 20 phun leh a tum thu sawiin, mi zawng zawng chu thing pakhat an kih chuan a dang 20 phun zel turin a chah bawk.

Valentina tap lai hi a putea, Elangbam Monen Kumar chuan video-a lain facebook-ah a post a, heta tang hian mi tam takin an lo hre dark a, duhsakna pawh tam tak an dawng a, Forest officer, police officer leh an khaw miten thing tiak nen an chenna hmun an tlawh a ni. Manipur Chief Minister N. Biren Singh chuan hmeichhe naupang te, thingkikh avanga a chhungte thi ang maia a tap leh thingkung te a hmangaihzia a hmuh chuan a rilru a hneh thu sawiin Green Mission Brand Ambassador atan ani aia tha tur an awm chuan loh thu a sawi.



### SAI BIRTHDAY LAWMLAWM

Corbett Tiger Reserve chuan a vawikhat nan Sai note Sawan tia an koh chu a birthday lawm sakin Birthday Cake kg 140 lai a rit an siamsak!

Sawan birthday hi August ni 2 khan lawm sakin a duhzawng thil chi hrang hrang balhhla, chhangphut, buhpawl leh thil thlum lam chi atangte in cake lian tawk tak, kg 140 laia rit siamsakin derhken leh balloon chi hrang hrangin an cheimawi sak bawk a, Sawan hi derhkena siam parthi an awrh tir bawk.



Sawan hringtu Kachambha tia an koh pawh he hunah hian telve in birthday cake chu tui ti takin an ei a ni.

## TELANGANA STATE-AH TRIBAL LEH FILM STAR TE'N RAMNGAW THIAH DODAL



Tribal mipui dodalna thlawpin Tollywood (Telugu cinema) star te chuan Nallamala Reserved Forests, Telangana state a Uranium laihchhuah tumna awm mek chu an duh loh thu an tlangaupui zui zel a. Sekhar Kammula leh Panar Kalyan te hnung zuuin Vijay Devarakonda pawhin aw a rawn chhuah ve leh ta.

"Nallamala Forests, acre 20,000 zet chu chhe mai thei dinhmunah a ding mek a ni. Kan dil (lake) te kan ti chhe zova, mihring chenna hmun ah tui a len laiin kan lovah khua a kheng a. Kan khawpui tam tak chuan tui an tlachham mek a. Hetiang a nih mek lai hian tui hnar kan la neih chhun tlemti te chu tihchhiat an nih theihna tur khawp chhuanlam tling kan la siam theia, Nallamala Foorest pawh hi a him ta lo," a ti.

"Uranium hi kan duh a nih chuan engatinge kan lei mai loh? Kan lei theilo a nih chuan engatinge sawrkar hian kan in chungah nizung chakna khawl thei (solar panel) min dah tir mai loh?" a ti bawk. Nallamala Forest thiat a Uranium laih chhuah duh tute chu zawhna zawtin," Uranium chuan kawlpetha (Electricity) pawh chu lo siam ta teh reng ila, boruak thianghlim hip tur leh tuithianghlim in tur kan neih si loh chuan enge awmzia awm ang?" a ti bawk.

Hetiang taka an dodal tak avang hian Telangana sawrkar in uranium laihchhuah a tumna chu sut leh a nih tur thu Chief Minister K Chandrasekhar Roa chuan a sawi a, mipuite chu lungngai lo turin a chah. Uranium laihchhuah phalna (in-principle permission) hi Ministry of Environment, Forests & Climate Change chuan Uranium Mining Corporation hnenah a lo pehman tawh a ni.

### MAN VS WILD-AH PRIME MINISTER MODI

Television series lar tak, Man vs Wild-a Prime Minister Narendra Modi lanna chu August ni 12 (Monday) zan khan tihchhuah a ni. He show hi darkar khat chhung tih chhuah ni in PM Modi chu he show host-tu Bear Grylls nen Jim Corbett National Park, Uttarakhand-a an chetla lai tih chhuah a ni.

PM Modi chuan Bear Grylls nena ramhnuiaia an awm chhung hian a nuna thil thleng pawimawh tak tak te

sawi chhuakin kum 17/18 a nih lai vela an in chhuahsan a Himalaya-a akal chu a experience hlu ber a nih thu leh tun thlenga a nun kaihruaitu a nih thu a sawi. Kum 13 chhung Gujarat Chief Minister a nih hnu leh Prime Minister hna kum 5 chhung a chelh chhung hian he show hi a chawl (vacation) hmasa ber a nih thu a sawi. Kan khawsak dan phung (lifestyle) chu Environment humhimna kawnga harsatna min thlentu lian ber a nih thu leh kan nawmsak nan kan thlah lo la awm turte pawh ngaihtuah lova nungcha leh ramngawte kan tihchhiat thin thu sawiin kan ramngaw leh nungchate humhalh tur chuan hmasawnna rintlk (sustainable development) kan ngaihpawimawh a tul thu a sawi.

Prime Minister chuan he show hi hmang tangkaiin amah support-tu leh social media lama follow tute chu ramngaw humhalh (Forest Conservation) chung changa an ngaihdan te NAMO App kaltlanga thawn thin turin a ti a. Chung ngaih dan thawtu zinga thazual thlan chhuahte chuan Prime Minister hmuhna chance an nei ang a, an ngaihdan pawh Prime Minister hnenah an sawi thei dawn a ni. Khawvel hmun hrang hranga he show thlirtu mipuite chuan India ram hmun hrang hrang tlawh an chak phah tur thu leh he show vang hian environment conservationin sawi a hlawh phah ngei thu a sawi bawk.



He show hi ramsa humhalh lam leh sik leh sa inhlak danglam chungchang mipuite hnena zirtirna (awareness) pekna atana tih a ni. Ram hrang hrang 180 chuangah tih chhuah a ni a. He special episode hian infotainment Genre-a entu tam ber record a siam a, Discovery channel chu viewer ngah thuah pathumna hialah a kai chho bawk a ni. Prime Minister Modi hmaah hian US President Barack Obama te, American lemchan thiam Will Ferrell, Zac Efron, Jake Gyllenhaal len Ben Stiller te pawh he show-ah hian an lo inlan tawh a ni.

### RAM KANGIN KHAWVEL A TI BUAI

**Amazon ngawpui kang:** Amazon Ngawpui hi khawvela tropical rain forest kan neih len ber a ni a, a ngaw pumpui 60% hi Brazil ram chhung a awm a ni. Amazon forest hian boruak chhia Global warming thlen thei

Carbon dioxide mihringin kan tihchhuah za zela 20% vel a hip ral zel anga chhut a ni a, kum 2018 tleng khan Amazon forest a ramngaw za zela 17 chu tih chereu a ni tawh a ni.

National Institute of Space Research (INPE) in a tarlan danin kumin chhungin Amazon forest chhungah hian kangmei 73,000 chuang a chhuak tawh a, nikum lam aiin kangmei chhuak a letin atam tawh zawk a ni. Kangmei hi a chhuah ngun em a vangin tuna kang mek pawh hi a kan tan hun tak hriat theih a ni lo a, nimahsela August ni 15 khan kangmei hi a nasat a vangin ngaihven a hlawh lehzual a ni.



Environmentalist te chuan Brazil ram President Jair Bolsonaro chu sawkarna an chelh hnuah Amazon forest chhunga ei bar zawnna leh thil hlu laihchhuah lam te a phalrai avangin ramngaw humhimna ngai pawimawh lo leh kangmei chhuak a mawh phurtu berah an puh a ni.

Hetih lai mek hian South America a ram pasarih Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru leh Suriname ram hruaitute chuan Amazon ramngaw humhim a nih theih nan inremna an siam a, disaster response network dinin Satellite monitoring an kalpui dawn bawk nia hriat a ni. Engnge a an zel dawn i lo thlir phawt mai teh ang u.

**Indonesia ram kang rapthlak:** September thla tir a Indonesia ram kang chu he chanchin buatsaiah lai tleng hian thelh mih a la ni lo. Indonesia sawrkar thuneitute an vir buai hle a, ram thenawmte atangin demna leh kangmei thelh mit thuai tura nawrna a nasa sawt hle. President Joko Widodo pawh a thu hle hle thei lova,



Indonesia President Joko Widodo a n ram kang a tlawh

hmun thenkhat a ram kang thelh lai chu a hmunah a tlawh nghe nghe.

Ram kang hi a nasa hle a, zing, chhun leh tlai pawh hriat hran theih lohvin meikhu a zing chuai reng a, boruak a khu in a bawlhhlawh hle bawk a, mihring leh ramsate tan a manganthlak takzet a ni. Tlai lamah phei chuan boruak hi rapthlak khawpin a sen phut thin. Indonesia ram kang hi oil palm ching tute ram hal thin vang ni a ngaih a ni a, mi 230 chuang kangmei chhuak kaihhnawihah hian an man tawh a, tlawhna tlawlk chhuak tur 100 chuang an cancel tawh bawk.



Boruak khu leh bawlhhlawh chu

He ram kang hian a thenawm ram Malaysia leh Singapore pawh a nghawng na hle a, meikhu bawlhhlawh avangin an dawh theilo sawt hle a, Indonesia an demna leh kangmei thleh mit tura an nawrna thawm a ri ring sawt hle.

## RAMHMUL DAMDAWI

- M Sawmliana, MFS Rtd.

### SAMTAWKTÊ / TAWKTÊ

Botanical name : *Solanum anguivi* Lam. (= *S.indicum* L.)  
Family : Solanaceae  
English : Forest Bitterberry / African Eggplant

**A pianhmang:** Thlai hling nei leh kumhlun, meter 1.5 – 2.0 vèl chauhva sang; a kûng chu a upat hma chuan a hmul deuh thup a, hling zum phêk tam tak a kûngah chuan a awm thin. A hnah chu a tung sâwl niin, a tlâng sir a kâk thluah bawk a, a hnah chung leh hnuai chu a hmul thiap bawk. Arsi ang deuhvin, nawinâwk rawngin a pâr a; a rah hi a mûm a, cm khat hawlhtlang vêl chauha lian a ni; a hmin chu a eng a, a bâwr bâwrin a rah thin. A rah hel hi chawhmeha hman thin niin, bazâr-ah te pawh an zuar fo thin. tawktê hi ching awm bawk mah se, chin lohvin in bul leh dai vêlah hmuh tûr a awm tho va, kumtluanin a pârin a rah bawk thin.

**Damdâwi atâna hman te:** A zung, a hnah, a rah leh a chî.

**A hmannâ te:** Thisensâng, zunthlum, asthma, khuh, âwmnâ, pumnâ, khawsik, mîtliam, zun in, kawpuar, chaw pai that theih loh vânga pum nuam lo, cancer,

rûlhût pai, kawthalo, luak, lung tha lo, hmeichhe thi neih dâwn leh neih laia tai na ngawih ngawih, dam-lohna vâng emawa thla tin thi nei lo, nau har, hnuteitui nei tlèm, tîsa châkna chak lo, sam tla-kawlh, kâng, khawihlî, ha-nâ/hâ-ngèt, âwmvèl, ringworm, vun vâr, phâr, thak leh bawl, rûlchuk, tît seh, khuai zûk leh khawmualkaikuang seh atân te a tha. A rah hel hi a khâ a, chawhmehah an hmang thin a; chaw ei a tituii pumpui tichaktu tha tak a ni bawk.



## KEIMAHNI

► Mizoram Forest Service (MFS) Junior Grade zawm tharte chuan Central Academy for State Forest Services (CASFoS), Dehradun-ah training an zawm ta. Training hi kum 2021 June thla velah an rawn zo ang.



EF&CC Deptt. chuan duhsakna sang ber kan hlan e.  
(L-R: Bryant Zorintluanga, Lawmnapari, R Lalruatfela, Vanlanunpuii Hmar & R Lalnungleng)

► EF&CC Dept. hnuia officer thenkhat te hetiang hian an awmna hmun siamrem an ni a, an hna thar hi an zawm tawh hlawm a ni.

S.N	Officer hming	Awmna thar
1	Pu C Vanlalena, IFS	CF (SC)
2	Pu H Lianmawia, IFS	CF(WL) & FD, DTR
3	Pu Kawlhuna, IFS	DFO, Aizawl
4	Pu C Lalbiaka, IFS	DCF (WL), Aizawl
5	Pi Lalrammawii Sailo, IFS	Principal, FTS
6	Pu Laltlanhlua Zathang, IFS	DFO, Kolasib
7	Pu Lalnunzira, IFS	DFO, Kawrthah
8	Pu Mahesh Zoramthara Singson, MFS	DCF, Headquarters
9	Pu Lalduhthlana, MFS	DFO, Champhai
10	Pi Margaret Lalramchhani, MFS	DFO, Thenzawl
11	Pu PC Lalchhandama, MFS	DFO, Khawlzawl
12	Pu PC Laltanpuia, MFS	DFO, Extension
13	Pu Lalbiakchama Chawngthu, MFS	DFO, Tlabung
14	Pi Jenny Sailo, MFS	DFO, N. Vanlaiphai
15	Pu Laldinthara, MFS	WPO (S)
16	Pu C Lalthankima, MFS	DCF, Lawngtlai
17	Pu Solai Azyu, MFS	ACF, Lawngtlai
18	Puy PC Lalthankima, MFS	ACF, Lunglei

► Kumin Independence Day lawmna pui ber Aizawl Sipai Lammuala neih ah Forest Training School (FTS) a Forester leh Forest Guard training mekte chu a vawikhata na atan parade contingent-ah an tel ve. Parade hi department officer leh staff thahnem takin a hmunah enin an lo tawiawm a ni. He thil hi department tan chhinchhiah tlak tak a nih avangin a tel te hi lawmpuina certificate pek vek an ni. Participants te leh a buaipuitu FTS Principal leh Staff te thawhrimna a fakawm hle.



## PENSION

Kumin June thla thleng khan kan thawhpui duhawm tak tak mi 45-in min chawlhsan tawh a, July-Sept chhung hian heng mite hian Superanuation-in min chawlhsan leh ta.

S N	Name	Designa-tion	Date of Superanu-ation	Place of Posting
1	Lalrinmawia, IFS	CCF	31.07.2019	PCCF Office
2	Lalthanzuala	Dy. Ranger	31.07.2019	R.O. Bukpui (Kolasib)
3	Lalremmawia Sailo	Forester	31.07.2019	Cham-phai
4	R Lattleipuii	LDC	31.07.2019	Aizawl
5	Lalrinsanga	Forester	31.08.2019	Darlawn
6	Vanlalina	Forest Guard	31.08.2019	Thenzawl
7	Thuamzakunga	Dy. Ranger	30.09.2019	R.O. Ngopa (Chp)



H Lalzarliana hi ni 15.03.1967-ah a piang a, ni 06.03.1987-ah Lalawmpuii nen in-neiin fa 6 an nei. 1987 December-ah Forest Guard-in hna a tan a, ni 04.05.2018-ah Forester-ah a kaisang. Zunkawng fel lo, pum nuamlo leh typhoid avangin ni 02.09.2019 khan min peih loh san ta a ni.

Pu Lalthatluanga (9.1.1985 - 23.8.2019)



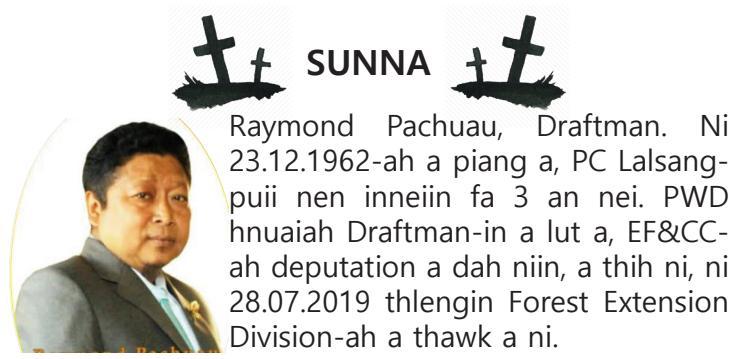
hi 2007-ah P. Mali hna a zawm a, mahse driver angin chhawr a ni a, hmun hrang hrangah a awm kual ve. A nupui PC Zothansangi nen fa 3 an nei a. A hun hnuhnungah hian CF (CC) a thawk a ni. Brain Tumor avanga hun rei tak a tuar hnuin ni 23.8.2019 khan min peih lohsan ta a ni.

## FTS CONVOCATION

Ni 27.08.2019 khan Forest Training School, Bethlehem Vengthlang-ah 2019 Batch Forest Guard Trainees te Convocation hman a ni a, Pu TJ Lalnuntluanga, Hon'ble Minister, EF&CC Department chu Chief Guest niin, Pu Ajai Sexena, Principal Secretary, EF&CC Department chu Guest of Honour a ni bawk. An ni bakah hian Dr. CHM Rao, Principal Chief Conservator of Forests leh Officer dang te'n he hun hi an hmanpui bawk a ni.

Forest Guard te hi batch 2-ah then niin nikum khan batch hmasa zawk chuan training hi an lo zo tawh a, kumin hian batch hnuhnung zawk hi an training ve leh a ni. A pumpuia titha 3 te chu a hnuai ami te hi an ni.

S.N	Hming	Pa hming	Mark %
1	Lalhminghlua	Lalropuia	83.9 %
2	H Lalrosanga	H Doliana	83.73 %
3	C Lalruatkima	C Thangchungnunga	83.46 %



**SUNNA**

Raymond Pachuau, Draftman. Ni 23.12.1962-ah a piang a, PC Lalsang-puii nen inneiin fa 3 an nei. PWD hnuaiah Draftman-in a lut a, EF&CC-ah deputation a dah niin, a thih ni, ni 28.07.2019 tlengin Forest Extension Division-ah a thawk a ni.

Lalthanpuia, 28.06.1971-ah a piang a, Vanlalhruauii nen inneiin fa 5 an nei. Hun rei tak MR-a a thawh hnuin 2018 khan regular appointment pek a ni a, min thawhpui rei hman ta lovin BP sang leh thawhah avangin ni 01.09.2019 khan min peih loh san ta a ni.

