



REPORT

Specialized Training on the Application of Modern Tools and Techniques in Forestry

25 September-01 October 2022
Assam Forest Guard School,
Makum, Tinsukia, Assam



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1. Acknowledgement

Training is one of the important aspects for the knowledge and skill upgradation of the staff to carry out their functions effectively towards achieving the aspired targets to reach the broader goals of the organization. Assam Forest Guard School has a broader goal to train the Forest Guards and other field-implementing units with the skills necessary to address issues of conservation and protection of forestry and wildlife. The training has helped the Forest Guards to get acquainted with Modern tools and technologies, their relevance in the field of conservation along with the recent developments important to the sector.

We would like to sincerely thank the APFBC project, supported by AFD-India (Agence Française de Développement), for their guidance and for the funding to hold the training program on Specialized Training on the Application of Modern Tools and Techniques in Forestry and providing the needed fund from APFBC project.

Moreover, we would like to express our gratitude to Shri K.S.P.V. Pavan Kumar, IFS, Additional Principal Chief Conservator of Forests, Biodiversity, and Climate Change, as well as Project Director-Project Management Unit (PD-PMU), Assam Project on Forest and Biodiversity Conservation (APFBC) Society, for his direction, support, and guidance that helped the training program be completed successfully.

The accomplishment of this training would not have been possible without the regular guidance, suggestion, and direction of Dr. Sonali Ghosh, Chief Conservator of Forests -Research, Education and Working Plan (REWP) Division. We offer our gratitude for her kind support and input.

Additionally, we would like to express our thanks to all the faculty members, including Mr. M.K. Goswami, DFO, Govt. T.T. & S. Plant, Makum, Ms. Kasturi Sule, IFS, ACF, Digboi Division, Mr. M.C. Phukon, F.R.(Retd.), and Mr. P. Sharma, F.R. (Retd.), Ms. Papor Khatoniar, F.R., Dibrugarh Division, Mr. Mayurakshya Bharadwaj, F.R., AFGS, Makum, Mr. M.P. Bania, Fr-I, AFGS, Makum, Mr. Gyan Sharma, Institutional Development Specialist, APFBC, Mr. Jiten Goswami, Deputy Ranger, AFGS, Makum, and all other personnel who were directly or indirectly involved with the training sessions.

Further, we would like to express our gratitude to Director, Assam Forest School, Jalukbari and his team for providing the necessary communication to spread the word about our program via Twitter.

We would like to express our appreciation to all the AFGS staff and other members for their assistance and cooperation during the training process.

Superintendent,
Assam Forest Guard School,
Makum, Tinsukia, Assam

2. Background

The employee in the organization is accountable for a variety of duties and obligations, which might vary from simple chores to complicated operations. As a result, every employee needs to understand the organization's goals, culture, and operational processes via-a-vis their job descriptions, and responsibilities. Some of the obligations assigned to the individual may even necessitate the usage of specialized talents. In addition, the employees must have the correct mindset to carry out their responsibilities.

Organizations must make provisions to educate, develop and enhance the skills of their employees through various training programs. The Assam Forest Guard School aims to provide Forest Guards, foresters, and other employees with the necessary skills to address issues of conservation and protection of forests and wildlife.

The Assam Forest Guard School was established in 1980 and is situated in the industrial city of Makum, Tinsukia, Assam. The goal of this training school is to provide training to the front-line employees of the forest department. Since its inception, the school has trained about 2,889 Forest Guards and Game Watchers. The Research Education and Working Plans (REWP) Division, Forest Department of Assam oversees the administrative functions of the Forest Training Institutes, whereas the Superintendent oversees the Assam Forest Guards School. The Assam Forest Guard School runs a number of specialized training programs as and when required. Specialized training in the application of modern tools and techniques in forestry was conducted recently from 25 September to 01 October 2022. The training report is prepared to explain the details of the training program conducted.

3. Specialized training in the Application of Modern Tools and Techniques in Forestry

The Assam Forest Guards School in Makum conducted specialized training on the use of contemporary and modern tools and techniques in forestry from 25 September to 01 October 2022, for the Forest Guards and Game Watchers. A total of 17 forest guards/game watchers participated in the above-said training program. The funding for this training was sourced from the APFBC Phase II.

The main objectives of this training were:

- Awareness on issues and challenges pertaining to the conservation of forests and wildlife
- Sensitize on the recent technological interventions, use of technology
- Hands-on experience with applications of modern tools and techniques

The training included lecture sessions from the senior forest officials of the department having extensive knowledge and experience in forestry-related topics and practical know-how. The training included an overview of forest policy and law, contemporary forestry instruments, Global Positioning System (GPS), computer applications, knowledge of digital callipers, weather meters, and the importance of drone technology for aerial surveillance, among others.

For hands-on experience in GPS application training, the participants visited Lakhpathar Range in Digboi Division. On their way to the Raja Ali Beat Office, the trainees also stopped by the Digboi Museum and War Cemetery. The participants, here, learned how to seize stumps, logs, and other hammer imprints. As

part of the field trip, visits to the Govt. T.T. & S. Plant Division, Makum and Dhola Sadiya bridge were also conducted. The detailed day-wise session of the training program is presented in this report. The training module for specialized training is placed in Annexure - 1 for reference.

4. Participants in the training

17 participants (Forest Guards: 17) from 14 divisions participated in the training program (the list of participants is placed in Annexure II for reference).

5. Resource Persons' Profile

The resource person's team comprised departmental experts, retired foresters, and an APFBC project representative. Given below is a brief description of the resource persons along with the sessions conducted by them (See Annexure -1 for Module for Specialized Training).

Table 1: Resource person profile

Sl. No	Name of the Facilitator	Designation	Session Title
			Registration
1	Mr. Saidul Alam	Superintendent, Assam Forest Guards School, Makum	Welcoming the participants and Inaugural session Group discussion and feedback
2	Mr. M. K. Goswami	DFO, Govt. T.T. & S. Plant, Makum	Introductory session – basic knowledge of modern tools and their importance in forestry Forest Conservation Act 1980/Minor Mineral Concession Rule 2013
3	Mr. Mayurakshya Bharadwaj	F.R., AFGS, Makum	Practical session: working with GPS at Lakhpathar RF under Digboi Division
4	Ms. Paporri Khatoniar	F.R., Dibrugarh Division	Brief knowledge of digital calliper and weather-meter Field Practical: working with the digital callipers, weathermeter, and GPS at Dihing Patkai National Park (supported by Mr. Mayurakshya Bharadwaj)
5	Mr. Gyan Sharma	Institutional Developmental Specialist, APFBC	Team Building and Motivation
6	Ms. Kasturi Sule	IFS, ACF, Digboi Division	Computer application and downloading of data from GPS to PC Brief knowledge of Densiometer Importance of drone technology in terms of aerial surveillance of forest areas and demonstration

Sl. No	Name of the Facilitator	Designation	Session Title
			Field visits and training on the operation of drones.
			A brief session on routine maintenance of modern tools to increase their lifespan
7	Mr. Jiten Goswami	Deputy Ranger, AFGS, Makum	Field practical working with GPS and Densimeter at Charaipung Range under Digboi Division (supported by Mr. Mayurakshya Bharadwaj)
8	Mr. M. C. Phukon	Forest Ranger (Retd.)	Role play on implementation of Forest Law along with case study
			Field visit to Dhola-Sadiya to study riverine ecological succession
9	Mr. P Sharma	Forest Ranger (Retd.)	Wildlife Protection Act 1972
10	Mr. M. P. Bania	Fr-I, AFGS, Makum	Field visit to Kherjan beat office for learning seizure procedure of stumps, logs & various hammers and enroute visit to Digboi museum (supported by Mr. Rekibuddin Ahmed, Deputy Ranger, Digboi Range)
			Computer application and downloading of data from GPS to PC.
	Valedictory function		

6. Venue and Date

The training was organized at Assam Forest Guards School, Makum from 25 September to 01 October 2022.

7. Training methodologies

The following training methodologies were used in the training program:

- Lecture and group discussions
- Group exercises and group assignments
- Individual exercises
- Powerpoint presentation

8. Proceedings

The day-wise proceedings of the training are mentioned below:

Day 1: 25 September 2022

Session I: Registration and Inaugural Session

The inaugural session began with the registration of the trainees, handing over the reading materials and the welcome kit.



Picture 1: Registration and welcoming of Participants

Session II: Wildlife Protection Act 1972

Resource Person: Mr. P Sharma, F.R. (Retd.).



Picture 2: Discussion on Wildlife Protection Act 1972

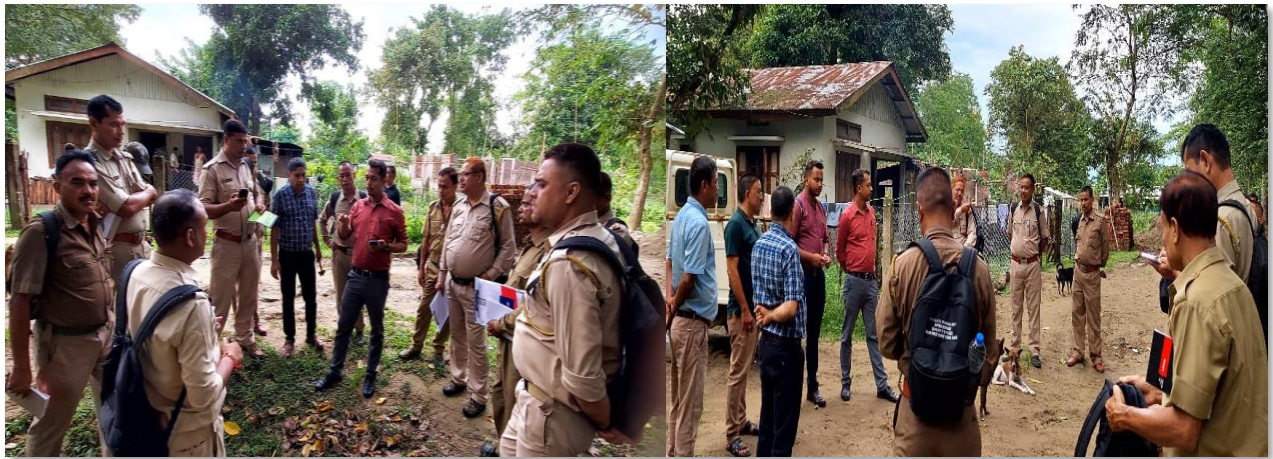
The objective of safeguarding the many varieties of flora and animals (across the country) was explained to the trainees. They were instructed on the many definitions provided by the Act, including those for hunting, trophies, animal articles, etc. They were instructed on the process followed for the declaration of any National Parks and Wildlife Sanctuaries in accordance with this act, as well as the accompanying penalties, for any offenses.

Key takeaways from the session:

- Important definitions as per the act.
- Provisions on Prohibition of hunting.
- Declaration and Protection of Wildlife Sanctuaries and National Parks.
- Constitution of Various Bodies.
- Schedules under the Act.

Session III: Field visit to Lakhipather RF under Digboi Division for learning seizure procedure of stumps, logs & various hammers.

Resource Person: Mayurakshya Bharadwaj, F.R., AFGS, Makum and Jiten Goswami, Deputy Ranger, AFGS, Makum.



Picture 3: Field visit for learning seizure procedure

The field visit helped the trainees to identify various types of hammers in the department, their proper use, seizure procedure, etc.

Key takeaways from the session:

- Proper use of hammers for making various markings
- Safekeeping of hammers
- How to conduct search and seizure

Day 2: 26 September 2022

Session I: Wildlife Protection Act 1972

Resource Person: Mr. P Sharma, F.R. (Retd.).



Picture 4: Discussion on Wildlife Protection Act 1972

The objective of safeguarding the many varieties of flora and animals (across the country) was explained to the trainees. They were instructed on the many definitions provided by the Act, including those for hunting, trophies, animal articles, etc. They were instructed on the process followed for the declaration of any National Parks and Wildlife Sanctuaries in accordance with this act, as well as the accompanying penalties, for any offenses.

Key takeaways from the session:

- Important definitions as per the act.
- Provisions on Prohibition of hunting.
- Declaration and Protection of Wildlife Sanctuaries and National Parks.

Session II: Brief knowledge of Digital Caliper and Weather meter

Resource Person: Paporri Khatoniar, F.R., Dibrugarh Division



Picture 5: Session on calliper and weather meter

The session covered various calliper types as well as how to use callipers to measure a tree's diameter at breast height precisely. The benefits and drawbacks of using the callipers were also discussed with the trainees. Also highlighted was the use of weather meters to research the microclimate of forests.

Key takeaways from the session:

- Proper handling, maintenance, and usage of the equipment
- Discussion of several measurement units
- Taking precise measurements of a tree's diameter at breast height

Session III: Field Practical: Working with Digital calliper, Weather meter, and GPS at Raja Ali Beat Office under Digboi Division and enroute visit to Digboi Museum.

Resource Person: Papori Khatoniar, F.R., Dibrugarh Division, and Mayurakshya Bharadwaj, F.R., AFGS, Makum



Picture 6: Practical session on use of Digital Caliper

The participants used calipers to measure the diameter of trees at breast height. Both the traditional tree calipers and the digital caliper's accuracy were evaluated. The appropriate and hands-on operation and upkeep of the equipment were experienced by the trainees.

Key takeaways from the session:

- Proper handling, maintenance, and usage of the equipment
- Discussion of several measurement units
- Taking precise measurements of a tree's diameter at breast height

Day 3: 27 September 2022

Session I and II: Computer application and downloading of data from GPS to PC

Resource Person: Ms. Kasturi Sule, IFS, ACF, Digboi Division



Picture 7: Computer application and downloading of data

The different computer components, their functions, as well as the use of computer applications in general and in the forestry sector, in particular, were covered in the session. The participants were also shown how to use GPS and mobile-based apps to capture and record the tracks and footprints of the places they patrol and transmit the data to the computer.

Key takeaways from the session:

- Learning and understanding different computer components and their functions
- Using computers in the forestry industry
- Using GPS and mobile-based location monitoring and tracking applications

Session III: Field visit and training on the Operation of Drones.

Resource Person: Ms. Kasturi Sule, IFS, ACF, Digboi Division.



Picture 1: Hands on experience of Drone technology

The launch, navigation, and landing of the drone using remote controllers were demonstrated. A briefing on the different applications of a drone, including search and rescue, surveillance, weather monitoring, firefighting, drone-based photography, videography, etc. was also given to the trainees.

Key takeaways from the session:

- Learning about the parts of a drone & their uses
- Application of drones in the Forestry sector
- Hands-on experience in using remote controls to launch, navigate and land the drone

Day 4: 28 September 2022

Session I: Role Play on implementation of Forest Law

Resource Person: Mr. M.C. Phukon, F.R.(Retd.)



Picture 9: Role play on implementation of forest law

The trainees received an introduction to the various laws governing and related to forest conservation and protection in the session, along with details of their key provisions and case studies.

Key takeaways from the session:

- Knowledge of the various laws pertaining to forests
- Key sections and practical applications of the laws during relevant situations
- Case studies and real-life scenarios to help trainees learn how to apply forest rules

Session II: Role Play on implementation of Forest Law along with Case study

Resource Person: Mr. M.C. Phukon, F.R.(Retd.)



Picture 10: Case study discussion on Forest Law

The various laws governing forests were explained to the trainees in this session, along with their key provisions and different real-life case studies.

Key takeaways from the session:

- Learning various laws governing forests.
- Important sections and how to apply them in relevant situations.
- Case studies and stimulating real-life scenarios for a better understanding of the application of forest laws.

Session III: Field visit to Sadiya Range and session on seizure procedure of logs, stumps and various hammer impressions and enroute visit to Dhola- Sadiya Bridge.

Resource Person: Mr. M.C. Phukon, F.R.(Retd.)



Picture 11: Field visit to Dhola-sadiya

The trainees were instructed on how species in a particular region gradually adapt and evolve in response to their environment until equilibrium is attained. They also learned about how geography, environment, and other physical variables influence the process of soil genesis. The field visit helped the trainees to identify various types of hammers in the department, their proper use, seizure procedure, etc.

Key takeaways from the session:

- Ecological succession and idea on pioneer species, seral community, and climax community.
- Process of soil formation and its profile, structure, texture, etc.
- Proper use of hammers for making various markings
- Safekeeping of hammers
- How to conduct search and seizure

Day 5: 29 September 2022

Session I: Introductory Class on Modern Tools & importance in forestry. Basic knowledge of the application of GPS

Resource Person: Mr. M.K. Goswami, DFO, Govt. T.T. & S. Plant, Makum



Picture 12: Introductory session on Modern Tools

The participants were introduced to the recent technological advancement and cutting-edge modern tools and equipment utilized in the fields of forestry and wildlife conservation, during this session. Additionally, they received a fundamental and theoretical explanation of the utilization of GPS.

Key takeaways from the session:

- Relevance of modern tools and techniques in present-day forestry
- Their use and maintenance.
- Constitution of Various Bodies
- Schedules under the Act

Session II: Forest Conservation Act 1980/Minor Mineral Concession Rule-2013

Resource Person: Mr. M.K. Goswami, DFO, Govt. T.T. & S. Plant, Makum.



Picture 13: Session on Forest Conservation Act 1980

The trainees were given a brief overview of the Forest Conservation Act of 1980 act throughout the session on how the act helped to safeguard the forest, together with its flora, wildlife, and other various biological components, while conserving and preserving the integrity and territory of the woods.

Key takeaways from the session:

- Roles of the central government, state government, and other authorities to take any decisions related to forestry
- Penalties in case of violations and other related aspects

Session III: Motivation for Forest Guard and Game watcher

Resource Person: Mr. Gyan Sharma, APFBC



Picture 14: Session on team building

The session covered soft skill aspects such as understanding self through the Johari Window, Problem-solving mechanisms and needs, characteristics of the team, and team building in the forestry sector.

Key takeaways from the session:

- Need to understand self to better understand others.
- Importance of out of the box thinking in problem-solving aspects
- Understanding team, and team building process
- Role of team building in the forestry sector

Day 6: 30 September 2022

Session I: Application of GPS in Forestry

Resource Person: Mr. Mayurakshya Bharadwaj, F.R., AFGS, Makum.



Picture 15: Application of GPS in Forestry

The trainees were explained in detail about the application of GPS in forestry such as fire prevention, aerial spraying, fire control, harvesting operations, determination of boundaries, mapping systems, wildlife management as well as insect infestations. The trainees were given hands-on experience in the use of GPS in the field for collecting waypoints and tracks in this session.

Key takeaways from the session:

- Recording a location's latitude and longitude.
- Making route-specific tracks.
- Using GPS to arrive at a predetermined point.

Session II: Computer application and downloading of data from GPS to PC

Resource Person: Mr. M.P. Bania, Fr-I, AFGS, Makum.



Picture 16: Computer Application and Use of GPS

The different computer components and their functions, as well as computer applications in general and in forestry in particular, were covered in this session. Additionally, the trainees learned how to use GPS and mobile applications to record the tracks of the places they patrol and send the information to a computer.

Key takeaways from the session:

- Learning about the parts of a computer & their uses
- Application of computers in the Forestry sector
- Use of GPS and mobile-based location-tracking apps

Session III: Field visit to Govt T. T. & S. Plant Division, Makum, address by DFO M.K. Goswami sir and field exercise on Hands on Operation of GPS device, how to take waypoints and track using GPS.

Resource Person: Mr. Mayurakshya Bharadwaj, F.R., AFGS, Makum and Mr. M.P. Bania, Fr-I, AFGS, Makum.



Picture 17: Application of GPS in Forestry

The trainees were given a tour of the Govt T. T. & S. Plant and briefed about the various works that were carried out in the Division including Timber treatment, seasoning, joinery unit and saw mill. The trainees were given hands-on experience in the use of GPS in the field for collecting waypoints and tracks in this session.

Key takeaways from the session:

- Importance of timber treatment and seasoning and the process how it is carried out.
- Recording a location's latitude and longitude.
- Making route-specific tracks.
- Using GPS to arrive at a predetermined point.

Day 7: 01 October 2022

Session I: Brief on routine maintenance of modern tools to increase their lifespan

Resource Person: Mr Mayurakshya Bharadwaj, F.R., AFGS, Makum and Mr Manas Prateem Bania, Fr-I.



Picture 18: Maintenance of modern tools

The trainees were taught about the proper maintenance of modern tools so that it is less likely to breakdown, which leads to increased uptime, more working hours for the equipment, fewer repair costs, and therefore increased revenue.

Key takeaways from the session:

- Proper maintenance of modern tools.
- Proper storage of the devices.

Session II: Group Discussion and feedback



Picture 19: Group discussion session with the participants

The session was held to understand the group's understanding of different sessions and their usefulness in their daily chores of work-life, and how the training program has helped them to evolve and work more efficiently. It was followed by the gathering of feedback from the participants.

Session III: Valedictory function.

The session was concluded with a closing ceremony speech by the Superintendent of Assam Forest Guards' School followed by certificate distribution to the participants of the training.



Picture 20: Valedictory Function

9. Other Activities

Every morning, PT sessions were conducted to maintain the physical fitness of the trainees.



Picture 21: P.T. sessions

10. Feedback of Trainees

The trainees were asked to fill out the feedback form questions on a rating scale of 1-3 where 1 is the lowest and 3 is the highest. The detail of the feedback is presented in the Annexure below. The following findings were obtained from the response of the trainees on the below-mentioned points

General Feedback

Before the training

It was found that the trainees had hands-on experience and were part of their regular day-to-day work on the sessions that were taken during the specialized training course. Only 25% of the trainees shared they were fully confident in terms of sessions that were conducted, whereas an equal no of respondents (38%) marks them either 1 or 2 which means the knowledge aspect needed to be enhanced.

After the training: Knowledge and skill upgradation

Overall, it was found that the trainees feel their knowledge and skill were upgraded after the training program.

- 88% of the trainees rated the overall training program as excellent whereas the other 12% rated it good. 63% of the trainees found the training program fulfilling their expectations to the utmost level.
- 81% of the trainees rated excellent in terms of enhancing their knowledge level
- 94% of the trainees rated excellent in terms of their skill upgradation
- 88% of the trainees rated the training design to be excellent

Learning environment and support mechanism

Overall, the trainees were provided with the best learning environment as well as support mechanisms which supported the overall success of the training program.

- 88% of the trainees rated the learning environment at the center to be excellent
- 81% of the trainees found the quality of training materials including visuals (PPT), whiteboard, OHP, Handouts, etc of excellent nature
- 81% of the trainees rated excellent to the support and guidance provided by the school staff, faculties, and officials of the institute

Other aspects

Though none of the trainees marked the accommodation and boarding facilities poor/average but the center might need to improve these for the future training program.

- 56% of the trainees rated the accommodation and boarding facilities at the hostel were excellent and other 44% rated it good
- 69% of the trainees rated the quality of food including breakfast, lunch, dinner, etc were excellent and others rated it good.

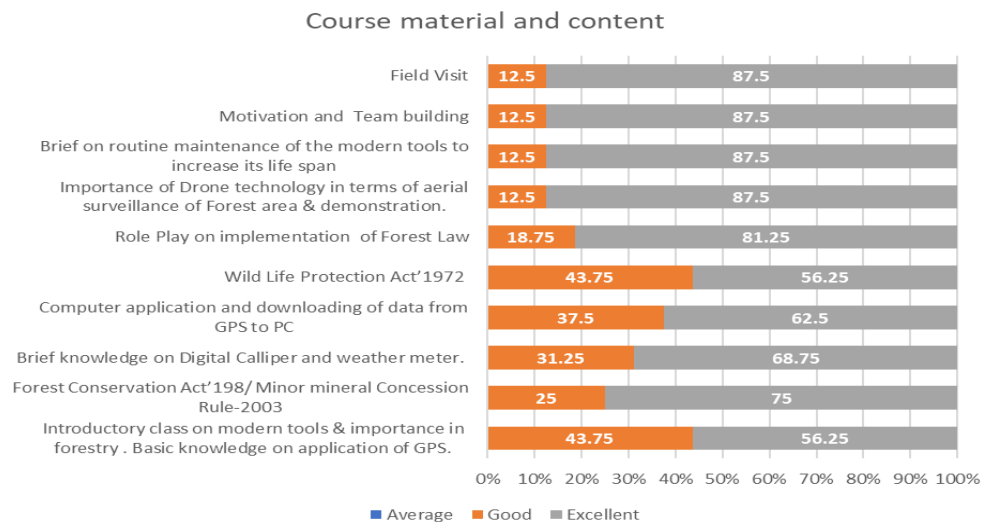
Sl. No.	Topic	Percentage Marking		
		1	2	3
1	How do you rate your knowledge/ skill/ idea of the subjects of the course before training	38	38	25
2	Does this training fulfill your expectations	6	31	63
3	Does the training help in acquiring knowledge on relevant subject	0	19	81
4	Does the training help in skill upgradation	0	6	94
5	Whether the training design is sound and relevant	0	12	88
6	Whether a conducive learning environment was provided by the trainers	0	13	88
7	Quality of training materials including visuals (PPT), whiteboard, OHP, Handouts, etc	0	19	81
8	Assistance/ help/Guidance/ treatment from the school staff, faculties, and officials of the institute	0	19	81
9	Accommodation/ boarding facilities at the hostel	0	44	56
10	Quality of food including breakfast, lunch, dinner, etc	0	31	69
11	How do you rate the training overall?	0	12	88

Sessions Feedback

Course materials and content might need to be developed for a few courses for better knowledge dispersal

The trainers rated the course materials and course contents used during the training process either as Excellent or Good. Field visits were highly appreciated by the trainers. Course contents of five sessions were rated excellent by more than 80% of the respondents. which includes trainers taking sessions on the Importance of Drone technology, Routine maintenance of Modern tools, Role play on the implementation of Forest Laws, and Motivation.

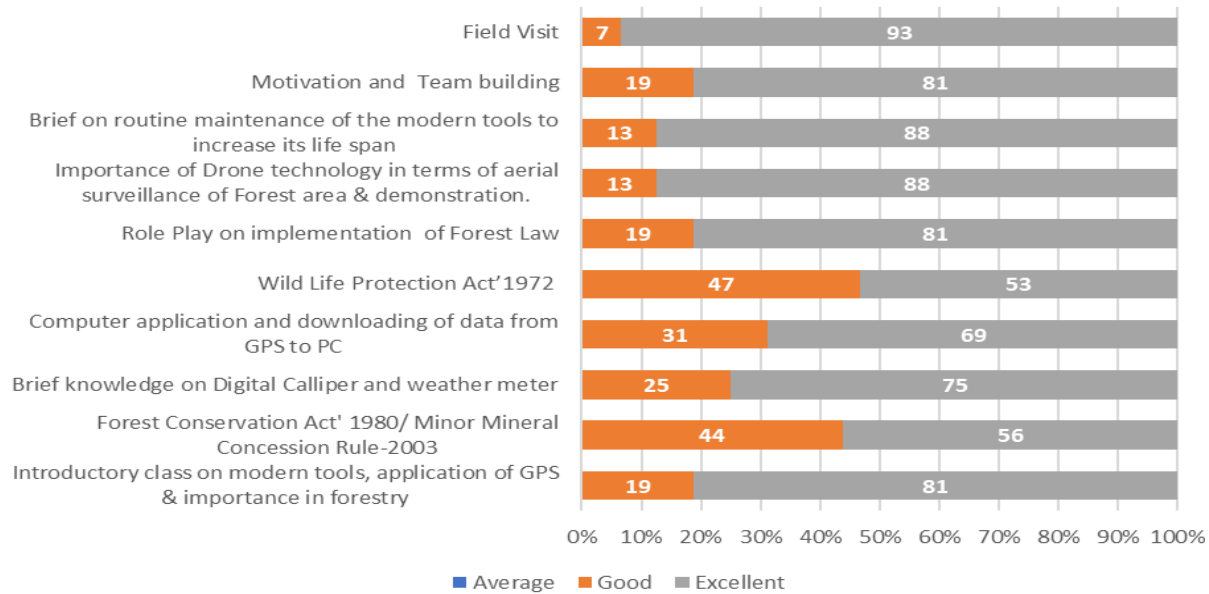
The other five sessions' course contents probably need some rework as they were comparatively rated lower.



Course contents, however, meets the expectation of trainees

The trainers rated the course contents meeting the expectation of the trainees either as Excellent or Good. Course contents meeting the expectation of the trainees of six sessions were rated excellent by more than 80% of the respondents. These sessions were: Importance of Drone technology, Routine maintenance of Modern tools, Role play on implementation of Forest Laws, Introductory class on modern tools, application of GIS in modern forestry, and Motivation.

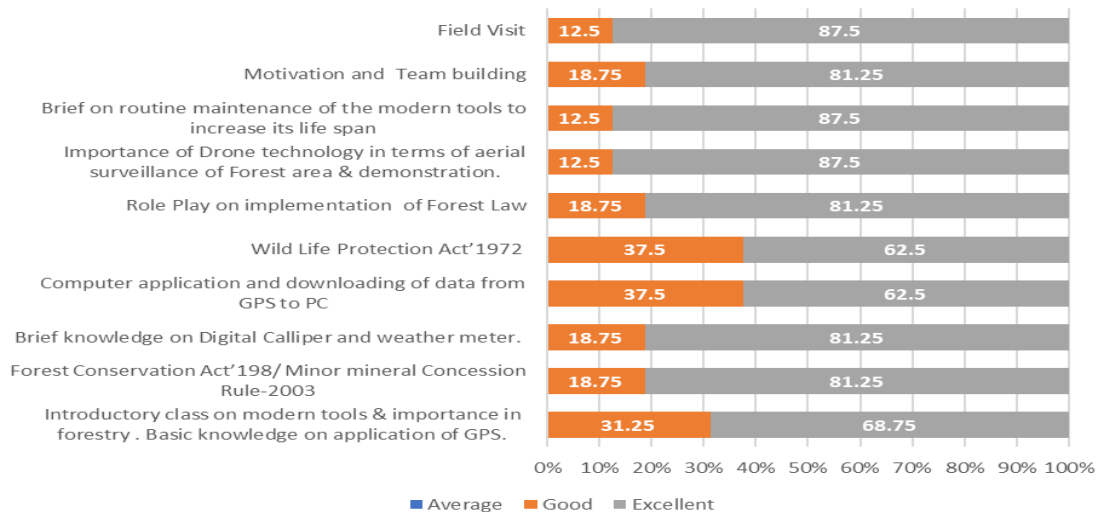
Course content meet expectation



Course materials used during the training program have practical applicability in work situations

The trainers rated the practical applicability of the course material in the day-to-day work of trainees either as Excellent or Good. Field visits were highly appreciated by the trainers.

Practical application of the course material in work situations

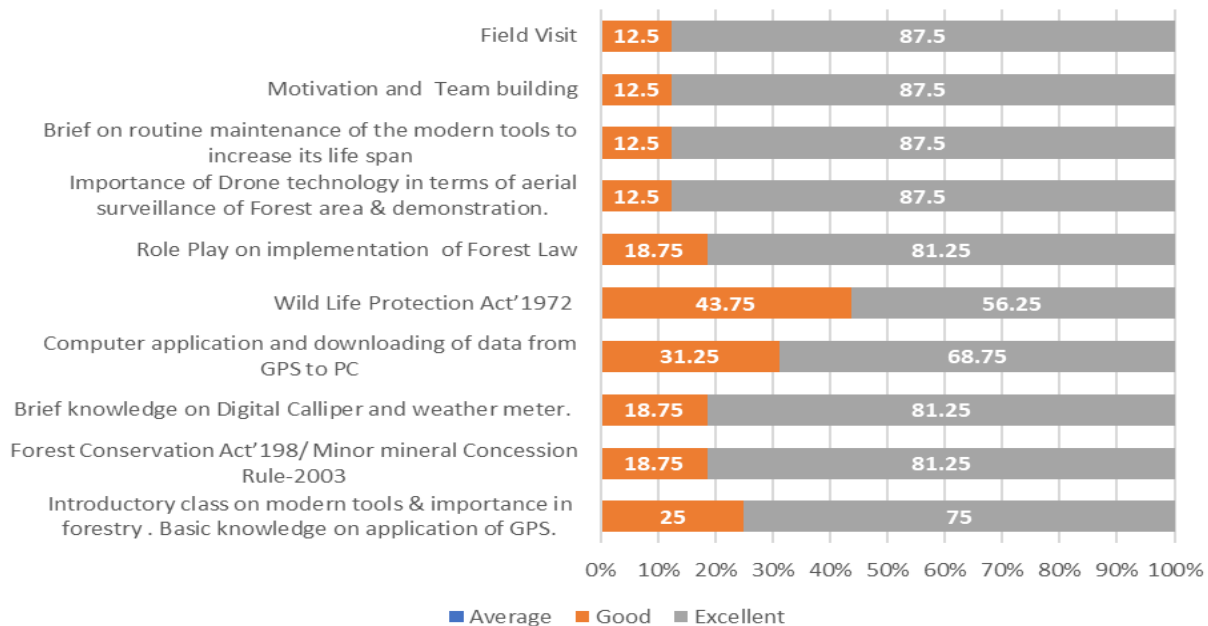


Course contents meeting the expectation of the trainees of seven sessions were rated excellent by more than 80% of the respondents. These sessions were: Importance of Drone technology, Routine maintenance of Modern tools, Role play on implementation of Forest Laws, Introductory class on modern tools, application of GIS in modern forestry, Knowledge of digital calliper and weather meter and Motivation

The structure or design of the training program was found to be appropriate

The structure of the training program of seven sessions was highly rated by the trainees. The trainers rated the structure of the training program either as Excellent or Good. Field visits were highly appreciated by the trainers.

Structure of the training program



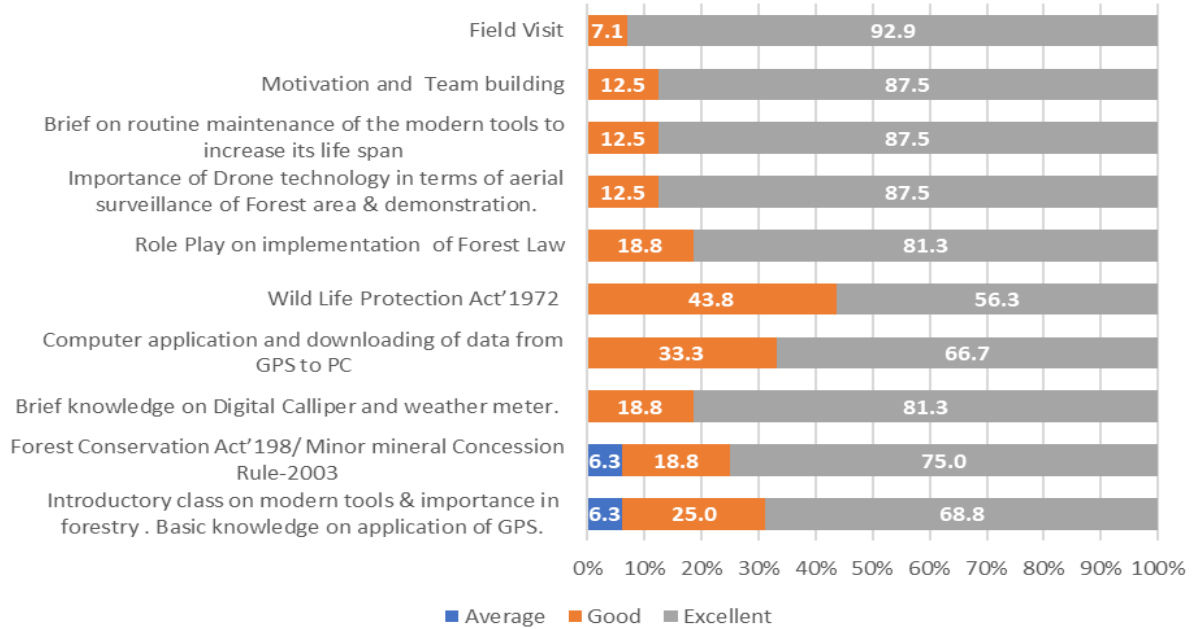
The highly (80% and above) rated sessions were on Drone technology, Maintenance of modern tools, Motivation, and team building, Role play on implementation of forest law, Knowledge of digital calliper, Forest conservation Act, and others

The training program was found to be useful

The usefulness of information and knowledge received during the training program is, generally, rated on the higher side. The trainers rated the presentation styles during the training process either as Excellent or Good.

Six sessions were rated highly (80% and above). Sessions on Drone technology, Maintenance of modern tools, Motivation, and team building, and Role play on implementation of forest law, were a few of the sessions that were highly rated by the trainees.

Usefulness of Training program

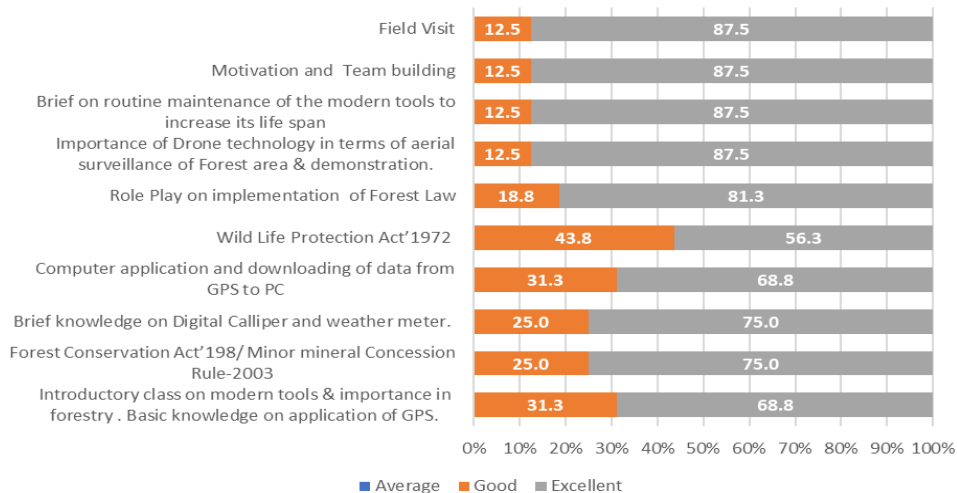


Training programs were appropriate to the level of trainees

The training program conducted was suggested to be highly appropriate by the trainees. They were marked either Good or Excellent by the trainees.

Almost five sessions were marked above 80%. Sessions on Drone technology, Maintenance of modern tools, Motivation and team building, and Role play on implementation of forest law, were a few of the sessions that were highly rated by the trainees.

Appropriate to the level of trainees

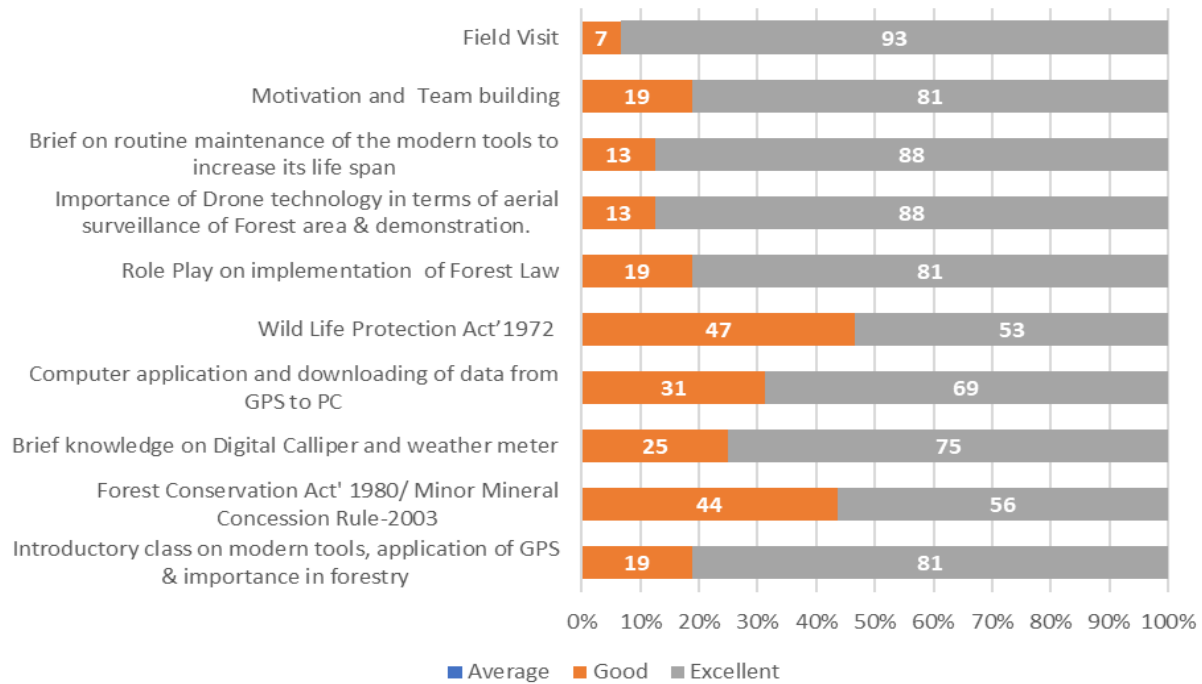


Training Process: Presentation Styles of the trainers were cherished

The trainers rated the presentation styles during the training process either as Excellent or Good. Field visits were highly appreciated by the trainers.

Presentation styles and training process in six sessions were rated excellent by more than 80% of the respondents. These sessions were Importance of Drone technology, Routine maintenance of Modern tools, Role play on the implementation of Forest Laws, Introductory class on modern tools, application of GIS in modern forestry, and Motivation

Trainer's Presentation Style

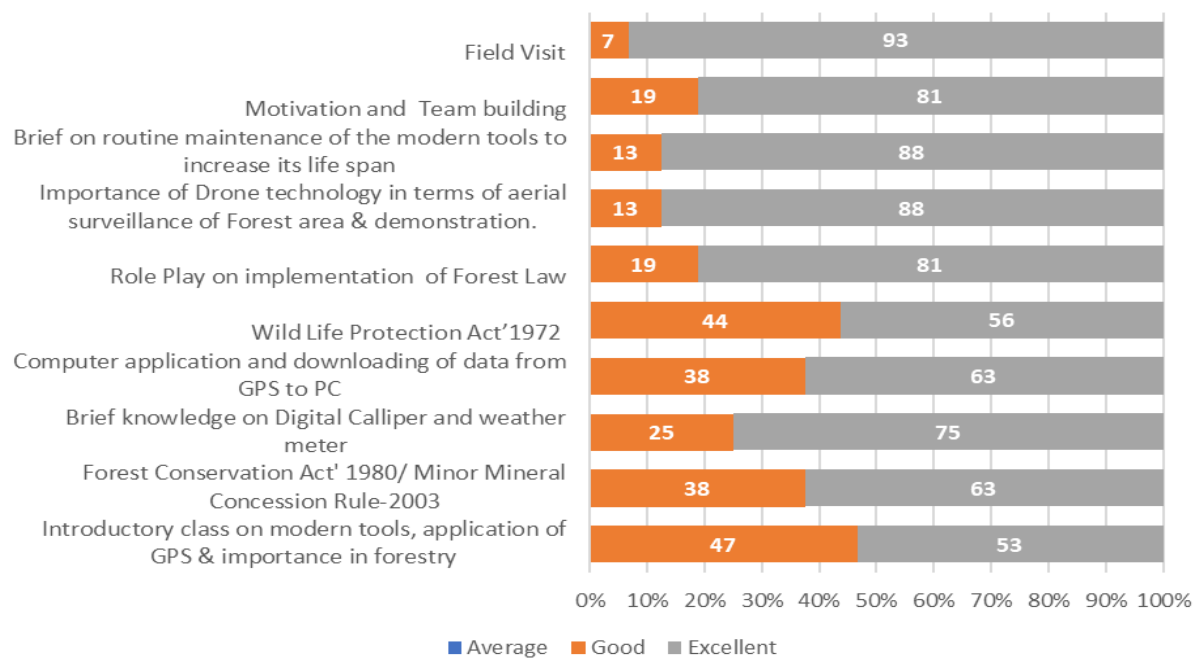


The facilitation skills of Trainers were appreciated by the trainees

The trainers rated the facilitation styles during the training process either as Excellent or Good. Facilitation during field visits was highly appreciated by the trainers.

Facilitation in five sessions was rated excellent by more than 80% of the respondents. which includes trainers taking sessions on the Importance of Drone technology, Routine maintenance of Modern tools, Role play on the implementation of Forest Laws, and Motivation.

Trainer Facilitation Skill



Feedback summary

The Forest Guards' seven-day specialized training in the use of modern tools and technologies took place at the Makum Campus. The whole training session, as well as the supporting and important settings, received high ratings from the Forest Guards.

The training sessions on the importance of drone technology, maintaining modern tools, role-playing the application of forest rules, using a digital calliper, and other topics were well received by the student. A field trip helped them to better grasp how to use this technology in their everyday work. The trainee gave field trips good marks.

The sessions and modules on the Wildlife Protection Act, Forest legislation, and Computer applications and downloading of data from GPS to PC need to be updated to keep the trainees' interest.

11. Conclusion

The Forest Guards' seven-day specialized training on the use of modern tools and technologies took place at the Makum Campus. The instruction was given offline. Forest officials and other specialists with in-depth knowledge of forestry imparted the training session to the participants. Topics such as - an introduction to modern forestry equipment, utilizing GPS, forest policy and legislation, computer applications, familiarity with digital callipers, and weather meters, and the significance of drone technology for aerial surveillance were covered in the course. Field visits were organized to provide participants with hands-on experience with GPS applications, drones, callipers, the process of capturing stumps, logs, hammer imprints, and others for their skill building.


The Forest Guards expressed their satisfaction through feedback mechanisms on the training content, methodology, and delivery of the trainers. They were highly satisfied with the entire training event. The participants responded positively to the training sessions such as using drones, digital callipers, and other tools. The field trips also helped in enhancing their knowledge and skilling using the tools and equipment.

Annexure- I: Module of Specialised training

Programme for one week specialized training on application of Modern tools and technique in Forestry for Forest Guards' School, Makum
Under APFC Scheme, Nos. of Trainees -20 each batch

Date	Time	Session-I	Time	Session-II	Time	Session-III & IV	Time	Time
		8-45 am to 10-15 am		10-30 am to 10-30 am		10-30 am to 12-00 Noon		
25-09-2022	Break fast	Registration and Inaugural Session (S. Alam, Suptd.)	T E A B R E A K	Wild Life Protection Act '1972 (P.Sharma, F.R.Retd.)	Lunch Break	Field Practical : Working with GPS at Lakhpathar RF under Digboi Division (M. Bhardwaj, FR/J. Goswami, Dy. Ranger)	Evening Tea	Dinner
26-09-2022		Wild Life Protection Act '1972 (P.Sharma, F.R.Retd.)		Brief knowledge on Digital Caliper and Weather meter (B.V. Sandeep, IFS, DFO, Dibrugarh Division)		Field Practical : Working with Digital caliper , Weathermeter and GPS at Dihing Patkai NP (M. Bhardwaj, FR/J. Goswami, Dy. Ranger/ M. Bania, Fr-I/ M. Gogoi, Fr-I)		
27-09-2022		Classroom activity : Computer application and downloading of data from GPS to PC (Kastauri Sule, IFS, ACF, Digboi Division)		Classroom activity : Downloading of Data from GPS to PC. Brief knowledge of Densitometer (Kastauri Sule, IFS, ACF, Digboi Division)		Field Practical : Working with GPS and Densitometer at Jukai RF under Dibrugarh Division (M. Bhardwaj, FR/J. Goswami, Dy. Ranger/ M. Bania, Fr-I/ M. Gogoi, Fr-I)		
28-09-2022		Role Play on implementation of Forest law (M.C. Phukon, F.R.(Retd.)		Role Play on implementation of Forest law alongwith Case Study (M.C. Phukon, F.R.(Retd.)		Motivation (Gyan Sarmah, APFC Office, Guwahati)		
29-09-2022		Introductory Class on Modern Tools & importance in forestry, Basic knowledge on application of GPS (M.K. Goswami, DFO, Govt.T.T.&S. Plant, Divn.)		Forest Conservation Act' 1980 / Minor mineral Concession Rule -2013 (M.K. Goswami, DFO, Govt. T.T.&S. Plant, Divn.)		Field visit for seizure procedure of stumps, log & various hammer impression (M. Bhardwaj, FR/J. Goswami, Dy. Ranger)		
30-09-2022		Brief on routine maintenance of the modern tools to increase its life span (T.C. Ranjith Ram, IFS., DFO, Digboi Division)		Importance of Drone technology in terms of aerial surveillance of Forest area & demonstration (T.C. Ranjith Ram, IFS, DFO, Digboi Division)		Field Practical : Operation of Drone (T.C. Ranjith Ram, IFS, DFO, Digboi Division)		
01-09-2022		Classroom activity : Computer application and downloading of data from GPS to PC (M.P. Bania, Fr-I)		Group Discussion & feedback (S. Alam, AFS, Suptd./M. Bhardwaj, FR/J. Goswami, Dy. Ranger)		Valedictory function (Hon'ble Guest) S. Ghosh, IFS, C.C.F, R.E. & W.P., Assam		

N. B. The programme is subject to change considering convenience of Resource Persons.


 (S. Alam, AFS)
 Superintendent,
 Assam Forest Guards' School, Makum

Annexure- II: List of Participants

Sl. No.	Name of Participant	Designation	Division
1	Palash Bhuyan	Forest Guard	Dhemaji Division
2	Lolit Doley	Forest Guard	Dhemaji Division
3	Nasiruddin Ahmed	Forest Guard	Nagaon Division
4	Pallab Saikia	Forest Guard	Dibrugarh Division
5	Kushal Kr Bora	Forest Guard	E.A.W.L Division
6	Santanu Phukan	Forest Guard	Jorhat Division
7	Pradip Senapati	Forest Guard	Genetic cell Division
8	Abdul Rahim	Forest Guard	Guwahati SF Division
9	Munindra Ch. Rajbongshi	Forest Guard	Guwahati WL Division
10	Golap Ch. Kalita	Forest Guard	Nagaon South Division
11	Ator Ali	Forest Guard	Nagaon WL Division
12	Gopal Saikia	Forest Guard	Jorhat Division
13	Raghu Ram Kalita	Forest Guard	Kamrup West Division
14	Moonjyoti Swargiary	Forest Guard	N.A. Division, Diphu
15	Suresh Timung	Forest Guard	N.A. Division, Diphu
16	Rajendra Singha	Forest Guard	Guwahati WL Division
17	Giasuddin Ahmed	Forest Guard	Kamrup East Division

Annexure- III: Feedback Format

FEEDBACK FORM

Specialized Training on “Application of Modern Tools & Technique in Forestry” for
Forest Guards & Game Watcher

At Assam Forest Guards’ School, Makum

With effect from 25-09-2022 to 01-10-2022

(Rate the following activities/subjects with A= Excellent, B= Good, C= Average)

1. General impression/Idea about the content of the Course before training :

A	B	C

2. Does this training fulfil your expectations:

A	B	C

3. Does this training help in acquiring knowledge on relevant subjects:

A	B	C

4. Does this training help in skill up-gradation :

A	B	C

5. Whether the training design is sound and relevant :

A	B	C

6. Whether a conducive learning environment was provided by the trainers :

A	B	C

7. Quality of training materials including visuals (PPT), whiteboard, OHP, handouts, etc. :

A	B	C

8. Assistance/ help/guidance/treatment from the School Staff, Faculties, and Officials of the Institute:

A	B	C

9. Accommodation/Boarding facilities at the Hostel :

A	B	C

10. Quality of food including breakfast, lunch, dinner, etc. :

A	B	C

Subject-wise rating :

(i) Motivation Class

Topic Structure			Interest Generated			Delivering lecture			Reading materials			Overall Understanding		
A	B	C	A	B	C	A	B	C	A	B	C	A	B	C

(ii) Introductory class on modern tools & importance in forestry. Basic knowledge on the application of GPS :

Topic Structure			Interest Generated			Delivering lecture			Reading materials			Overall Understanding		
A	B	C	A	B	C	A	B	C	A	B	C	A	B	C

(iii) Forest Conservation Act' 1980/Minor mineral Concession Rule-2003 :

Topic Structure			Interest Generated			Delivering lecture			Reading materials			Overall Understanding		
A	B	C	A	B	C	A	B	C	A	B	C	A	B	C

(iv) Brief knowledge of Digital calliper and Weather meter

Topic Structure			Interest Generated			Delivering lecture			Reading materials			Overall Understanding		
A	B	C	A	B	C	A	B	C	A	B	C	A	B	C

(v) Computer application and downloading of data from GPS to PC :

Topic Structure			Interest Generated			Delivering lecture			Reading materials			Overall Understanding		
A	B	C	A	B	C	A	B	C	A	B	C	A	B	C

(vi) Wild Life Protection Act' 1972

Topic Structure			Interest Generated			Delivering lecture			Reading materials			Overall Understanding		
A	B	C	A	B	C	A	B	C	A	B	C	A	B	C

(vii) Role Play on implementation of Forest law :

Topic Structure			Interest Generated			Delivering lecture			Reading materials			Overall Understanding		
A	B	C	A	B	C	A	B	C	A	B	C	A	B	C

(viii) Importance of Drone technology in terms of aerials surveillance of Forest areas & demonstration :

Topic Structure			Interest Generated			Delivering lecture			Reading materials			Overall Understanding		
A	B	C	A	B	C	A	B	C	A	B	C	A	B	C

(ix) Brief on routine maintenance of modern tools to increase their life span :

Topic Structure			Interest Generated			Delivering lecture			Reading materials			Overall Understanding		
A	B	C	A	B	C	A	B	C	A	B	C	A	B	C

(x) Field Visit :

Topic Structure			Interest Generated			Delivering lecture			Reading materials			Overall Understanding		
A	B	C	A	B	C	A	B	C	A	B	C	A	B	C

Any other comment

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Name:.....Division.....

Annexure- IV: Certificate format

Forest Department,
Govt. of Assam

ASSAM FOREST GUARDS' SCHOOL, MAKUM

অসম চৰকাৰ
GOVERNMENT OF ASSAM

ASSAM PROJECT ON
FOREST & BIODIVERSITY
CONSERVATION

AFD
AGENCE FRANÇAISE
DE DÉVELOPPEMENT

**GOVT. OF ASSAM
ASSAM FOREST GUARDS' SCHOOL, MAKUM
CERTIFICATE**

This is to certify that

S/o.....

Under has attended
one week Specialized Training Course of Frontline Staffs (Forest Guards / Game
Watchers) from 25-09-2022 to 01-10-2022.

(Dr. Sonali Ghosh, IFS)
Chief Conservator of Forest
Research, Education and Working Plan
Assam, Guwahati

(Saidul Alam, AFS)
Superintendent
Assam Forest Guards' School, Makum



For more Information
Assam Forest Guard School,
Makum, Tinsukia, Assam