

**ANNEXURE – 6**  
**(See Proceedings of the Committee : Para 10)**

**Summary of suggestions/ opinions from Department (30.09.2010)**

**Kerala Forest and Wildlife Department**

**1. Sri. A.M. Babu Bonaventure, Deputy Conservator of Forests**

- Uniformly should be followed in wearing uniform by the Range Officers and protective staff
- Range Officers must wear given ribbons on their shoulders as an integral part of uniform.
- It will be ideal if the Range Officers and protective staff of the forest department also wear uniform similar to that worn by their counterparts in Police Department.

Rank in a Police Department	Uniform in Police Department	Equated category in KFD	Uniform worn now in KFD	Proposed uniform in KFD
DYSP	Khaki peak cap “KPS” khaki whistle chord	ACF	No Uniform	No Uniform
CI	Khaki peak cap “KPS” , 3 stars, blue & red ribbon, khaki whistle chord	RO	Khaki peak cap “KFS” , 3 stars, whistle chord	Khaki peak cap “KFS” , 3 stars, green & red ribbon, Olive green whistle chord

**2. B. Sajeev Kumar, Divisional Forest Officer, Flying Squad, Idukki**

- Anticipate the vacancy arising in the next years and accordingly fill by advance selection and training to rectify the scarcity of staff in the field
- Amendment of existing laws in the first department as the present laws are highly inadequate to tackle the various law and order situations faced by the staff during their duty.
- The department itself to be revitalized without depending the police department Empower force officials to arrest persons who obstruct duly out side forest areas also.
- Timebound settlement of service matters and disciplinary cases of the field staff and ministerial staff
- Circulate the Compiled collection of copies of court orders and other department orders among the field staff also
- provide ration money, risk allowances for staff of forest department also as now enjoyed by the staff in police department
- Give continuous off days for two three days to those staff who are continuously working for two these weeks in remote areas from their home.
- proper training should be given to the field staff before posting them in the field

- Improve the training pattern and syllabus in the training schools according to the changed situation.
- Give training by giving more emphasis in biodiversity conservation, participatory first management, forest extension, investigation with modern technologies, GPS, Forest Inventory, Wildlife Forensic technology.
- Establish a forest academy and appoint efficient trainers selected from eminent officers.
- Establish a Cyber Cell under Forest Department.
- Provide Computers, digital camera, GPS etc to every office in the department and give timely serving to those equipments to avoid damages.
- Provide Cell phone instead of wireless sets.
- Establish separate cell for investigation and prosecution by including trained staff in each division/ Range/ station to change the cases in time.
- Improve and reform the forest code timely.
- Amend the forest schedule of rates in every year as per the change in consumer price index.
- Refix the mazdoors required for each type of work.
- Prepare range level/ station level/ section level maps through GIS depicting important matters like problematic areas, plantations, headquarters, Boundaries etc.

### **3. Sri. K.A. Nebu, Divisional Forest Officer, Flying Squad, Punalur**

- Use of modern technologies from forest protection
- Separate forensic using with modern forensic Laboratory for the Department.
- Post only trained staff in the field .
- Provide the service of special team to the problematic areas for a particular period of rotation basis.
- Apply the 8 hours job time in shift basis.
- Provide modern fire fighting equipments during the fire season.
- Give fire training to all the staff.
- Establish Forest stations in all the divisions throughout Kerala. (Sections within stations are more advisable.
- Periodical joint inspection of interstate boundaries should be conducted.
- Interstate meeting of the officials up to range officer level should be conducted at an interval of three months so as to control Ganja cultivation, Sandal theft, Poaching, etc including the Co-operation for arresting the habitual offenders and Sandal smugglers.
- Provide special incentives to staff working in problematic areas.
- Give good service entries and awards to those staff who have showed better service.

- Prove better accommodation, transportation and communication facilities to the staff working in interior remote areas.
- Compulsory posting of all the staff in problematic and remote areas for a certain period of time on a rotation basis.
- Give ten days special leave with leave allowance to staff, who are working in problematic area, for conducting tour along with family.
- Provide attractive salary, risk allowance and other incentives to the field staff.
- Change the forest cases in time after proper investigation.
- Appointment of an expert advocate at least in circle level to monitor the forest cases in situations when the services of APP is not available in forest Courts.
- Formation of a Reserve force at least in every circles.
- Avoid the posting of young officers and field staff in social forestry, Govt timber depots, Forest Check posts etc.
- Provide modern arms to the protective staff.
- Give training facilities handle modern arms and equipment.

**4. Sri. K.V. Subramaniam, Conservator of Forests (Inspection & Evaluation),**

**Kozhikkode**

- Establishment of two or three striking forces in each district for protection and amelioration of man animal conflict.
- Station system is implemented throughout the state
- Stations should be provided with on jeep, two motor cycles rifles for staff telephone GPS, computer, camera ropes, storeroom for arms, first aid kit, snake and animal restraining sticks, chip reader, camera trap, tranquilizing equipment, cages, dormitories and individual quarters to staff
- DFEIC centers have to be strengthened to carryout continues extension
- Social forestry divisions should also be given territorial charge of non-forest areas including charges for Give good service entries and awards to those staff who have tackling man animal conflict issues.
- In the case of arriving at less in offences, the decision has to be depending on local facts and on case by case basis
- Large divisions should be bifurcated into manageable units
- Every territorial range should have a deputy ranger to technically assist the range officer
- Administrative setup should be forest guard forester deputy ranger sub DFO\TA divisions DFO up to division level and then the conservator and chief conservator of forests
- Considering the need for decision making one chief conservator of forests should be amicable for three to four districts the strength of protective staff has to be increased
- Eight hour work has to be implement to the possible level

- The old compartment system could be re introduced for resource monitoring and management
- Invariably all beats\ sections should be within some station
- Within the stations necessary outpost, picket points and check post may formation as per local needs
- The rule for department in future would be as manager of biodiversity and build gene pool wealth, manager of exclusive wildlife habitat, extensive watershed manager and plantation manager
- Every forest guard is to have a department mobile plane for use within the department network
- GIS has to be a necessary tool of the Ranger and the WPO
- The department website has to be improved so as to enable data management on an online basis
- KFD should have a good Forensic lab for DNA analysis and forensic examination to the standards of acceptance by courts of law
- The relevance of separate social forestry unit could be expanded to include territorial functions outside forest area
- The training wing has to be strengthened for imparting wider training
- The posts of ACFs and DCFs both cadre and non cadre should be rationalized and repositioned by bifurcation of large divisions
- A deputy ranger as TA to each territorial range officer and a TA\sub DFO as gazetted assistant to each territorial DFO and wildlife wardens to functions property
- No staff shall be sent to field without training.
- They shall be refresh and short term training for entire department including the ministerial and protective staff
- Computer training should be given to all the staff and PFM training repeated to every batch of executive members of the V.S.S
- The training syllabus in training schools has to improved
- Association with panchayat department is indicated since social forestry comes within the ambit of panchayat Raj
- Research wing of KFD has to be strengthened
- Mechanized loading at government later could be implemented by the department of there is political will
- Association is needed with the police department in case of operations against offenders and intelligence gathering.

## **5. Sri. G.J. Teggi, Chief Conservator of Forests , High Range Circle, Kottayam**

### **a) Areas of modernization of Forest protection staff in terms of mobility, communication and equipment**

- Mobile phones
- Walkie-talkie in area not covered by mobile phone networks
- Adequate funds for maintenance of vehicles.
- Powers to sanction special repairs of vehicles at lower levels.
- Replacement of old jeeps
- Jeep to ROs also where Forest station system introduced now they depend in Forest station jeeps.
- Provide bikes, train the staff and encourage their use.
- Permitting sister departments/ LSG institutions maintain certain specified forest roads for example Alimukku – Mullumala road, and similar others that were in existence prior to FC Act 1980.
- Training in use and providing the It equipments.
- Arms, ammunition and power to use.

### **b) Application of modern technology for efficient forest protection and management**

- Digitalized forest map/ image interpretation.
- GIS based management/ Geo data base department.
- Interactive portals for updating the FMIS data base.
- Fire monitoring and Ganja detection through satellite image based inputs.
- Use of GPS and modern survey instrument like total station.
- Office management based on IT.
- Change traps.
- Micro watershed based management of forest resources for maximum eco-services.
- Inputs from research institutes in preparation of forest management plans.

### **c) Infrastructure needs for a modern forest force for their effective functioning**

- Study the requirement for building at each location with reference to already existing buildings and construct new buildings if absolutely necessary.
- Adequate funds for renovation and maintenance of existing buildings including residential quarters.
- Extension/ minor modifications to existing office buildings to house IT/ office automation equipments, old records etc.
- Improving the existing forest road network.
- More interpretation and training centers.
- Buildings for schools, housing and dispensaries n tribal settlement areas.
- Support to familiar – education, medical facility in remote areas.

**d) Human resource requirement/ management and reorienting their skills to the changing imperatives of environment issues**

- Functions of the department have increased the strength of field staff based on diverse service expected of the department.
- Posting the staff in different wings of the department based on aptitude.
- Consider more wings in the department to deliver specialized services/ requirement of department for example data base/ Information management, ecotourism, production forestry etc.
- Bring changes in qualification, age, and method of appointments (direct vs promotion)
- Consider the risk and risk coverage.
- Career progression chances to field staff.
- Specialized induction training (GPS, GIS & image interpretation, survey, PFM, watershed management Ethos forestry, scientific method for collecting NTFP etc)
- Refresher courses depending as the specialization requirement of staff.

**e) Redefine/ reorientation of mandate of KFD to meet the changing the role in view of climate charge issues**

Climate charge issue is one of the many challenges faced by the department role of the department and expectation of the public has undergone drastic change over past decades. Mandate of the department has to be redefined after wide debate involving representatives of all shake holders and the department should be strengthened in all respects to successfully handle the redefined mandate.

**f) Any other issues**

- Redraft all the formats related laws and rules based on democratic approach and participatory approach.
- Pollution control and bio-diversity conservation may be included in the part of forest department.
- Comprehensive review of existing delegation of powers and decentralization of decision making process.

**6) Dr.B.S.Corrie, Chief Conservator of Forests (Social Forestry), Ernakulam**

**a) Improve the Professionalism of the department.**

- Providing an enabling environment to the staff through improving the working enthusiasm of the staff fair placement norms, cadre management plan, and career plan management.
- To improve the professionalism of the department, documentation, planning, implementation, reporting, monitoring are urgently required to be introduced.

- Scientific temper requires to be integrated into the fabric of departmental functioning from the grass root to the top.
- To improve the professionalism of the department, a system of regular writing of paper, articles, attending workshops and conference is suggested.
- Reward and recognition to encourage meritorious to the services.

**b) Mandate of the KFD**

The mandate of the KFD shall be re-oriented to position the department as a provider of ecosystem services, while meeting the livelihood needs of the forest department community.

**c) Human Resource Management**

- Human resource management is the most important area of focus.
- The initial training to all field staff to be made practical.
- Periodic in service training with a written examination at the end of such training having a maximum pass mark is suggested.
- Training should be conducted by competent personal rather than having the same trainers giving training in stereo typed manner.
- Ministerial staff should be trained prior to initial posting.
- Periodic in service training and training prior to promotion for both ministerial and field staff is suggested so as to work successfully in the post to which promoted.
- For all staff a training prior to first posting, training prior to promotion and periodic in service training including abroad is suggested.
- The performance appraisal system needs a thorough review as it is highly subjective and reflects strong bias rather than factual assessment. A more objective system of performance appraisal is the immediate necessity. This is of

**d) Infrastructure facilities for effective functioning**

- Beat/ section/ station buildings should be adequately furnished to meet basic requirements of staff including electricity and water supply.
- Provision of rations and support staff.
- Tele- communication connectivity.
- Vehicle for movement.
- PDAS
- Provision of an office infrastructure with a conducive work environment that includes clean surrounding, clean and neat layout of office (highly essential to DFO/ CF/ CCF level)
- Quarters wherever required may be provided.
- Provide computers, laptops & IPAD's from Rangers and above along with wireless internet connectivity.

- Vehicles to be provided down to sections/ station levels and to beats when feasible. In difficult areas all terrain vehicles (ATV) to be provided.
- Field staff to be provided with sufficient arms and ammunitions.

**e) Application of modern technology for efficient forest protection and management**

- A system of instantaneous transfer of information from beat to head quarters is suggested. I.P. cameras at select locations, infrared technology, flare guns is suggested.
- A robust information network is suggested to be developed.

**f) Areas of modernization or Forest protection staff in terms of mobility, communication and equipment**

- Forest station system should be implemented in all the division together with FOREST BEAT SYSTEM.
- Deputy Ranger and Foresters should be issued pistols/ revolvers.
- Sim card should be issued to all the staff as in the Police Department.
- The Strength of Forest Guards should be increased to 4000 Nos and that of Foresters to 1500 Nos
- There should be one post of Deputy Ranger in each change.
- There should be one Jeep, two number of two wheelers for each Forest station, In addition one  
Each forester. In Social Forestry division one jeep should be issued to each Range Officer and one two wheeler to each Forester.

**In General**

- The existing administrative setup requires in charge.
- What is required is following the hierarchy with no short circuiting.
- Clear duties and responsibilities for each post to be laid down.
- Field staff needs to be increased such that there should be 2 beat guards for every 15 sq. km of Forest.
- The forest beat system to be reintroduced and forest beat must be the basic unit of protection and there must have a well developed informant network from guards to DFO.
- Specialized cadre is not recommended.
- The staff may be provided with PDA (Personal Data Assistant) I-Pad, Note book, IP cameras, wireless internet, flare guns, camera traps and secret system.
- Rationalization of IFS cadre with clear duties and functions so that the work content equally distributed.
- Training to be made practical oriented such that there is a observed difference in performance after training.
- There must be a test at the end of each training.
- Ministerial staff have been largely neglected and must be given due importance in matters and training.



- Prior to initial posting orientation and sensitization including equipping the personnel to undertake the task for performing duties is essential.
- Prior to promotion, training is to be made mandatory to equip the personnel for higher responsibility.
- Regular in service training is suggested including training educational tours within state/ Abroad
- The confidence levels of the field staff is a matter of great concern and requires immediate attention.
- Training are required in the matter of managing forests for eco system services, forest certification, carbon sequestration.
- Association with other wings of department such as agriculture, fisheries, soil conservation, education, environment, irrigation, and land use will be useful.
- The environment department should be brought under the forest department so that there is proper integration in the field level.
- Biodiversity conservation plan for the state, landscape, circle, Division are required.
- The working plans should be re-designated as Ecosystem plan or forest management plans.
- As part of forest research setup permanent observation plots across the state then under taker field related research in each range and final step is to provide a field biologist(Research Assistant) in each range with a research associate in each division, circle, Head quarters.
- The forest research wing has to be revamped and must spear head multi disciplined research in association with various research institute.
- Improve the scientific temper of the staff.
- More research should be done in specific areas such as multi species monitoring, habitat monitoring, productive estimation, Ecosystem services assessment, carrying capacity assessment, media and marketing strategies, carbon sequestration, marine environment management and local fisheries management
- The present system of thinning in plantations need a through over hand.

**7) Dr.K.P. Ouseph, Chief Conservator of Forests (Development)**

- Amicable solution for the shortage of staff would be to outsource some of the functions of the department.
- Agencification or engaging independent or semi independent agencies for execution of works should be thought of.
- Raising successful plantation shall be the mandate of the DFO.
- Delegation of more powers to DFOs for plantation management.

- Evaluation as a tool for assessment of success of any new or old programme and hence evaluation is an important tool in itself, aimed to modernize the public administration.
- People living in and around forest areas deserve special attention as for millennium development goals are concerned, for the over all protection and conservation of our forest resources.
- Achieving self sufficiency in wood requirement should be the mandate of the department since huge drain of state's wealth is happening now as 90% of the hardwood timber requirement of the state is being met now through import.
- Encourage private forestry in all sorts of land to reduce import of timber.
- Private forestry can be encouraged by amending the regulations and restrictions on tree harvesting.

**8) Sri. K.J. Martin Lowel, Divisional Forest Officer (Flying Squad), Kozhikkode**

- Bifurcate larger divisions and ranges for effective functioning and administration.
- Post more Regional CCF by reducing the area of jurisdiction for existing regional CCF, to improve efficiency.
- Give more powers to Regional CCF in the areas of Wildlife, Social Forestry etc.
- Retain only the posts of PCCF, CWW, APCCF (V), APCCF (A), APCCF (Pro & Dev), APCCF (WP & R) in the Forest Headquarters.
- To empower Social Forestry wing the post of ACF (SF) has to be upgraded to DFO (SF).
- Posting of forest guards also in social forestry.
- Give Government sim cards, and networking facility up to forester level.
- Provide E-mail facility and internet connection up to Range level throughout the state.
- Compulsory training to all the ministerial and field staff during the first year of their entry into service.
- With the help of Defence department do aerial monitoring during every month using helicopters to trace out ganja cultivation and other forest offences.
- Establish cameras in all the important interstate check posts.
- Establish camera traps in interior forests which are highly prone to illicit felling, poaching and ganja cultivation.
- Strengthen the research wing of the department.
- Bring the central nurseries under research wing.
- Just like Police Department, form a special investigation team when a major offence occurred.

- Establish electric fencing at the forest boundaries where the disturbance of wild animals are severe to agriculture.
- Kayyalas can also be erected in forest boundaries.
- Construct check dams where ever possible to store water for the use of local people to drinking water and agriculture. If possible it will be useful for the small scale production of electricity also.
- Modernization can be applied to govt. depots using power cranes, platforms, roads, and computer networking facility for caution.
- Include the drivers in protective category.
- Arrange the power to use guns for protective staff.
- Give permission to use rubber bullets to scare wild animals.
- Increase the number of protective staff.
- Reduce the 24 duty to 12 hour duty.
- Give training to tranquilizing animals.
- Establish district level flying squad divisions.
- Post only selected staff in flying squad for a period of five years.
- Post the staff as per their taste in different wings such as wildlife, Social Forestry, Research, Vigilance, Extension etc.
- Avoid the posting of staff working plan, research and in schools as part of punishment.
- Take steps to establish a Wildlife forensic laboratory for DNA analysis.

#### **9. Sri N.K Sasidharan IFS Conservator of Forests**

- Station-Range-Division-Circle-HQ could be the ideal setup.
- APCCF has the same delegation of powers as CCF and circles have new come under CCF. Therefore posts of APCCF of religious can be dispended with.
- Present strength of forest guards from 2404 has to be increased to 5516.
- Proportionate increase should be effected in foresters, deputy rangers as well as Rangers and no increase is needed in rest of the cadres.
- Station setup is ideal.
- Permanent camps should be setup in the interiors and camping made compulsory to all levels.
- Camp ration could be provided.
- Inspection of interior forests should be made compulsory.
- Specialized cadres for FMIS, Survey, Engineering and legal assistance could be sought or.
- GPS should be provided up to Forest guard level.
- Sophisticated survey equipments like total stations should be provided up to Division level with software for cartography.
- Mobile phones to be provided wherever mobile range is available (irrespective of the company) up to forest guards.

- Wireless to be provided in other areas.
- Computer with broad band connection up to Range level.
- Sophisticated arms for self protection like revolver, pistol may be provided upto guard level.
- Assault weapons such as AK-47, sten guns could be provided in all stations.
- Tranquilizing guns should be provided at range level.
- A helicopter would be ideal for the surveillance in the interior ganja suspected areas.
- A pyramidal administrative structure is ideal for forest department.
- The practice of creating ex-cadres in IFS is not ideal and unnecessary from 2015-16 onwards.
- Direct recruitment is only at Forest guards, Rangers and IFS level.
- Special training should be given to all the staff in the areas of use of modern equipments such as total station, GPS, computers, tranquilizing guns, management of man-animal conflicts, Ecotourism, Participatory forest management.
- Co-operation with other system departments such as police Excise, Agriculture, Animal husbandry, local self rent, revenue, tribal, Tourism, Central Railways, paid, KSEB etc are needed.
- Forest department and environment department should work together.
- There should be a radical change in the management of plantations.
- Research wing of the department should be developed.
- Research should be entrusted to scientists who have specialized in the respective surliest.
- Power chain saw, tractors etc have to be used for logging as part of mechanization.
- Time of action should be placed in the websites.

#### **10. Dr.N Krishna kumar, Director**

##### **Institute of Forest lamatics and Tree Breading, Coimbatore**

- The entire administrative setup particularly at the middles and camal levels to be managed by personnel with knowledge\ skills for scientific management of forest resources at on all.
- Increase the numbers of frontline staff.
- Staff with good communication skills and organizing ability need to be recruited for participatory management approach.
- Beat and section system to be continues.
- Beat staff should be well trained.

- Specialized cadres need to be created in the department with specializations on build of management, conservator of RET species, plantation management watershed management, soil conservation, fire management, GIS etc
- Services of forestry graduates (.B.Sc.forestry) will go a long way in scientific management of the forests.
- It is essential to recruit taxonomists in the department.
- A cadre for non protective staff ( as in case of army) for technical purpose may be created especially for data collection processing and management.
- The cadre also requires staff with degree in zoology, botany and veterinary science.
- Biological science should be given importance in recruitment planning.
- All the forest staff in beat and section levels need to be provided with suspected arms and ammunitions
- Replace old vehicles and give vehicles to section level.
- GPS equipment in sufficient number to be provided to all the staff.
- As in case of Madhya Pradesh Forest Department, mobile phones integrated with GPS may be provided to all the staff for communication and data transfer.
- There is a need to increase the strength of SFS cadre.
- Training needs to be imparted to all the frontline Forest staff before posting itself.
- Refresher courses to be imparted at regular intervals.
- More in service training on various aspects of natural resource management, management of plantations, disaster management, floristics, biodiversity, consumption etc to be provided for forest protective staff.
- Inter-sectoral linkages with various departments, institutions and universities will be useful.
- Forest department and environment department should work together.
- The research using of the department could be improved if it is undertaken in collaboration with the forestry research institution.
- Specific areas and action needed from the department in the field of special recovery research, reforestation of degraded forest area, biodiversity research, climate change research, environment impact studies etc.
- Apart from the usual action of timber in larger lots, action of smaller lots of benefit middle class people may be considered.
- Mechanization in depots is the need of the hour in the light of labour crisis storage methods need to be improved to reduce damage due to insets and other caused.
- Computer assisted sales process, transparency in sale process and processing should guide the sales and marketing strategy.

## **11. Sri Lakhwinder Singh, IFS, Chief Conservator of Forests (protection)**

### **General**

- Increases the number of staff.
- Transport and telecommunication facility to be provided at the forester and guard level.
- Training should be given to staff properly to carry out the various assignments.
- Revise the wage rate in the department.
- Area of jurisdiction has to be rationalized at beat, section, station and ranger level.
- Forest station system should be implemented throughout the state.
- Pay partly with police required up to Deputy Ranger level.
- Basic amenities have to be provided at the place work particularly when the posting is in the interior posts.
- Ration and other facilities to be provided as in the case of armed forces for posting in the interior forests.
- Over qualified persons should not be recruited as there is likelihood that they may leave the service at a short notice.
- Vertical interaction at various levels to more frequent to understand the problems and issues faced by them in carrying out various duties and functions assigned to them.
- Legal cells should be established in the territorial circle offices to successfully conduct court cases.
- Convenor system to be replaced with a system that brings in accountability and efficiency.

### **Training**

- No officer to be posted in the department without undergoing induction training.
- Specialized training for handling jobs in SF, PFM, ML, research wing, FMIS, GIS etc must be imparted before any assignments are given in these wings.
- Computer knowledge and use of modern budgets such as GPS has to be made mandatory at each level.
- FMIs and GIS applications to be given due importance. All levels of officers should be in a position to handle digital data.
- Training in use and handling of weapons should be given.
- All officers should know driving and swimming.
- Periodic up gradation of knowledge and skills must be carried out.
- Officers having special training to be used.
- Special training needs to be given to officials before they are posted to specialized assignments such as research, PFM, SF, intelligence gallery etc.

- Visits of officers of various levels to places within the state, outside the state and outside the country to study the developments taking place in other places.

**Weapons and other modern equipments.**

- Modern weapons and other modern gadgets have to be provided to protective staff.
- New equipments for summary of forest area should be provided at beat, section and Range levels also to be put to effective use to prevent encroachment.

**Tenure and aptitude for an assignment**

- Continuity of tenure should be ensured.
- Posting should be based on aptitude for an assignment.
- For the continuity of the projects and programmes in a particular wing some cadres should be permanently posted in this wing.

**Uniforms**

- Without on duty uniformed staff to be always in neat and clean prescribed uniform.
- Uniform of different colors may be prescribed for assignments where mingling with public is mandatory.

**Protocols**

- Duties at each level to be clearly defined.
- Procedures and protocols to be in place so that each officer knows his role in the implementation of the assignments.

**ACRS**

- Format for ACR at Range Officer and ACF level to be modified suitably to correctly assess the performance of officers. The present system has proven to be highly inadequate and subjective.

**Restrictions of Sandal wood**

- All restrictions on felling and utilization of sandalwood should go to encourage the people to grow sandalwood in their homesteads., temple premises and community land.

**12. Dr. B. Shivaraju IFS, Chief Conservator of Forests (Working plan &**

**Research)**

- Department can facilitate research in various areas by filling the interval between the basic research and its field application similar to the land to lab programme in agriculture.
- Avoid frequent transfers in the research wing and post only suitable people who have the aptitude in research.
- Post only skilled and trained people with research wing.
- Research degree of mechanization wherever possible has to be through of and tried on small pilot project.

- It will be worthwhile to taken up collaborative research in association with other research institution of scientists of repute in this build.
- Outsource the research activities to approach agencies and utilize the service of the existing establishment for preparing the working plans, which are over due.
- The hydrological potential of the forest the sitting process of the reservoirs the quantum of soil erosion from a particular area etc can be taken up for further investigation.
- Sociological aspects such as man animal conflicts over dependence on forest are aspects that require study.

### **13. Dr. K. Sudhakara, Associate Dean, College of Forestry**

- KAU can supplement qualified professionally trained people in the every filed related with forestry and related subjects.
- KFD can depute their staff for acquiring higher degree in Forestry at College of Forests, KAU
- Deputing KFD staff to equivalent cadres in the teaching positions at College of Forestry will also be mutually beneficial to both institutions.
- VHSC in Forestry/ Agro forestry may be included as the minimum required qualification for appointment as forest guards.
- The Forest officials of KFD need to be sensitized and trained with key area of Forest certification.
- In the research wing posts should be continued for the qualified staff posted.
- Small research grants/ fellowships may be made available to under graduate/ Post graduate students pf the KAU for short term research projects there by the projects will help in prepare baseline data required by the department.
- Post qualified people in Social Forestry research, Wildlife, working plan etc.
- There must be sound scientific bases for the management practices followed in the department.
- Adequately trained personnel at the field level are imperative for effective management of the forests.
- Avoid the selection of over qualified people to the selection of the posts of foresters and forest guards.
- Select VHSC forestry as the minimum qualification required for appointment as forest guards.

### **14. Sri. Trivedi Babu, Principal Chief Conservator of Forests (Wildlife) & Chief Wildlife Warden, Kerala (Full Addl. Charge)**

- Forest station may be established throughout the state forests.
- The Deputy Ranger in all the stations should be of age group less than 45 years.
- The institution of Regional CCF is redundant.
- There is no justification for continuing with the Chief Conservator of Forests at the circle level.



- The number of wings at headquarters can be brought down.
- Survey with modern equipment to know where the forest boundary exists.
- A separate cadre of extension working in each division needed.
- There is absolute necessity to increase the staff strength if the frontline staff and an arrange one Forest guard can be every 2 sq. kms forest area and 1 Forester for every 5 sq. km forest area.
- Instead of creating specialized cadres individuals can be encouraged to specialize in various fields of activity and they can be posted in those areas as far as possible.
- All the staff members down to the forest guards may be provided with mobile phones under a closed circuit group.
- All the stations may be provided with Arms, GPS, Telephone landline, Vehicles, etc.
- The department may supply ration to the field staff as they need to support to two establishment.
- The present cadre strength appears to be sufficient.
- The present practice of inducting forestry graduates without training needs change.
- Induction training shall be compulsory before joining the service.
- Minimum period of training is required for all the categories of ministerial staff also.
- Forest resource need to be managed in a more focused manner.
- The plantation sector shall be managed on the level of estate management aiming at maximum productivity.
- Mechanization shall be introduced in view of the shortage of labour.
- Every 2000 ha area of plantation can be managed as a separate estate.
- Department need not attempt any basic research being long term enterprise is not feasible as per the present administrative set up.
- The depots can be modernized by providing facilities for computerization and data analysis. Similarly depots can be provided with compound wall and good internal roads.
- Budgetary allocation is meager less than 1% of plan normally and hence it shall be 4% to implement the five years plans and working plan prescriptions fully.

**15. Sri.C. Balachandran Nair IFS, Chief Conservator of Forests**

**(Social Forestry), Kozhikkode.**

- Demarcation and digitization of forest boundaries of all administrative/ protective units need to be completed.
- Department need to have all baseline data collected and compiled watershed wise, for evolving sound management strategies.

- Territorial areas may be earmarked outside Government forests and Social Forestry Wing may be given charge of such areas including that of all forestry and related activities.
- A district level co-ordinator of all forestry and related activities (any IFS officers) may be thought of for co-ordinating with district administration.
- Increase the number of protective staff.
- Functions of APCCF may be defined.
- Present Forest system can only be effective if the stations comprise beats/ sections with individual responsibilities and not collective responsibility for the invaluable assets to be protected.
- Specialized units such as for FMIS, engineering works and for dealing with cases are necessary.
- Field level officers may be supplied with GPS and mobile phones.
- Total station equipment may be provided to the DFOs in territorial changes.
- Special training may be given in survey, Computer application, conduct of cases and in public relation and may be periodically upgraded.
- New areas in which training is required are HRD, biodiversity conservation and man-animal conflicts.
- Important departments with which interaction is to be sustained are mainly Revenue Department, Tribal Department, LSG, Police, Excise, KSEB, Irrigation, PWD etc.
- Mechanization of forestry operation necessary in view of paucity of labour force, high wage rates and poor output .
- Provide reasonable facilities and motivations to executive and protective staff for effective utilization of their potential in the staff.
- Centralized housing, revision of salaries and risk allowance at par with counterparts in Police Department can be thought of.
- Integrating environment department with forest department for effectively tackling environmental issues.

#### **16. Sri. Noyal Thomas IFS, Housing Commissioner**

- Modernization of the Human Resource Management is to be attended first before attempting modernization of activities of the Department. It is better to have a more flexible vertical hierarchy considering the new challenges and opportunities.
- A dedicated forest information network may be set up as is being done by Police Department.
- Mobile alert may also be commissioned using simple wireless enabled mobile phones as a closed user group (CUG) within department for effective communication from the Head office beat level.

- Minimum department vehicles needs to be maintained at Head office, Region and Circle level and rest could be met by hiring required vehicles.
- The equipments required for communication and protection may be procured as a bundled option for services rather than Forest Department maintaining the whole machinery and equipment later on.
- More dormitory type buildings with necessary facilities can be constructed in remote areas where it is difficult to maintain families.
- The usage of WLL sets/ mobile phones may be encouraged rather than going for the fixed land phones on remote areas. This will ensure the better functioning of the forest force.
- Small libraries with essential books may also be set up at station/ range/ division/ Circle levels.
- Division level websites may also be commissioned for uploading the data for the benefit of the all the protection staff as well as the general public.
- The strength of IFS cadre could be brought down to 72 or 84 as was in the earlier period.
- Only the state DCFs shall be entrusted with major responsibilities like non cadre Territorial and Wild life Divisions as well as Flying Squad Divisions.
- The system of SFS cadre management adopted in States like Tamil Nadu, Andhra Pradesh, Karnataka, Madhya Pradesh etc. could be considered for implementation in Kerala also.
- However, the direct recruitment to Range Officer level should be dispensed with and instead direct recruitment may be done at the level of Deputy Range Officers as is being done in the case of Police Sub Inspectors.
- In order to improve the protection and conservation activities the number of Forest Watchers, Forest Guards, Foresters and Deputy Rangers may be increased by at least 50%. Sufficient number of women may be recruited to the various cadres especially as Forest Guards, Foresters and Deputy Range Officer level so as to improve the public relationship at the field level.
- Sufficient care should be taken to weed out undesirable personnel from getting promoted to various cadres based on mere seniority.
- Government may utilize the NARGEA funds for agro- forestry in private lands.
- It is better to bring fragile eco systems of high attitude areas, river catchment areas and ecologically important water shed areas under conservation units by improving fire protection and preventing other illicit activities utilizing the latest equipments and well trained manpower.
- The areas under plantation may be rationalized according to the site.
- Effective utilization of latest technologies as well as participation of public and private sector may be followed for improving production of timber and other various products.

- Kerala Forest Department should be able to get more carbon credits for effective protection of its natural forest.
- Immediate amendment may be made to the existing forest code as it is an outdated and archaic document.
- A detailed procedure for the various activities may be prescribed as a “Forest & Wildlife Management code”.
- It is better to draw up landscape plans and then draw up division level management plans.
- Usage of Ecotourism as a conservation tool.
- A web enabled sales system may be devised for on lone purchasing of Timber from depots.
- Using internet banking facilities and credit cards.
- Further the manual auction could be controlled by developing appropriate sales softwares, thereby the chances of corruption could be eliminated in the whole process.
- All the territorial and wildlife divisions should have GIS based management plans with all necessary maps.
- The existing teak and softwood plantations may be replanted only if the area is good enough to support the 2<sup>nd</sup> and 3<sup>rd</sup> rotation crops. It would be better to revert those plantations which are located in interior areas by allowing the natural regeneration to come up.
- We may also consider Public-Private partnership in raising captive plantations of fast growing plywood and pulpwood plantation using the help of public sector wood based units and co-operative institutions or NGO groups.
- There is an urgent need to club Environment Department with the Forest Department.
- It would be better to have senior officers of IFS posted as Directors in Tribal Welfare Department considering the issues of “**Tribal Right Act**” in the state. It would be better to have Pollution Control Board and Kerala Forest Research Institute under the Minister for Forests & Environment to have a better co-ordination of activities related to Environmental and Forest Protection and conservation activities. A close interaction of Social Forestry with LSG Department and Rural Development Department is very essential considering the new “Greening India Programme” being taken up all over the country.

#### **17. Sri. Deepak Mishra, Assistant Silviculturist, FRI, Dehradun**

- The few areas which need strengthening are: Crime investigation, Crime prevention, Surveillance techniques, IT skills, Communication skills especially related to community dialogues, training on use of modern equipments, Wildlife management, Legal provisions related to forests and wildlife.

- New areas are: Forest Inventorization, GIS, IT skills, Project management, Wildlife Census and monitoring techniques. NTFP assessment sustainable harvest and marketing techniques.
- All categories of forest staff should be made aware of various schemes of the line departments on regular basis so that they may play a leadership role in helping VSSs to implement the schemes for the betterment of the tribals and other poorer sections of the community living inside or near the forests.
- Kerala should attempt for the certification of the rubber and homestead timber as per the SFM concept. This will help in the better marketing of the produce.

**18. Dr. Anil Kumar Bhardwaj IFS, Professor & Scientist, Wildlife Institute of India, Dehradun**

- The methodology of training has to be reworked with lot of focus on adult learning and interactive exercises. All this could be better possible if department could think of creation of a decentralized institution (like society) with lot of autonomy, flexibility and scope for innovations for the purpose of training under the overall control of department.
- Human Wildlife Conflict the biggest lacuna in our current system is lack of preparedness, planning, competent specialized manpower, adequate equipment and the response time to a situation. Keeping in mind the requirements of the state, it will be appropriate if at least three response teams with required mobility and equipment could be established and placed under the control competent staff/ officials and veterinary officers located at three suitable locations in the state.
- Periyar, Munnar and Parambikulam are good models for participatory programmes including ecotourism which has been used for strengthening the biodiversity conservation initiatives.
- These programmes are in the process of evolution and naturally passing through second generation problems. There is a need to re-look in to the strengths and weakness of these programmes and take appropriate steps for further strengthening of these initiatives.
- Wildlife Institute of India has already come out with guidelines for monitoring of Tiger co-predator, prey species and their habitats.
- This technique should become an important component of training programmes for the field staff. The landscape approach should be adopted at this juncture both at the organization level as well as for implementation.
- Each forest guard could be provided with a decent colored map of his beat which he can use while patrolling. I understand that lot of similar work has been done by GIS unit of the department with respect mapping. However, these maps are still not available in the field.
- There is a need to strengthen Periyar Foundation in terms of functioning, capacity building and overall management so as to make it more effective.

### **19. Sri. Narayanan Kutty IFS, Director, Eco tourism**

- Greening programmes under the “Food for work scheme” will have to be extensively implemented to ensure productive employment and food security.
- The fragile eco systems such as coastal areas, hills and mountains, wet lands etc needs to be protected in order to sustain livelihood of large number of people, apart from the ecological benefits they bring.
- Bio diesel offers unique solution to problems arising out of fossil fuel starvation and its environmental impact.
- Wildlife biology, migration studies of animals, predator-prey relationship etc should be given focus for training.
- One third of the force can be on women.

### **20. Dr. S.K. Khanduri IFS, Director, Environment Management Agency, Kerala**

- Land records and documentation are the most important factors which are most neglected as on now. Needs immediate attention.
- Skills for dealing with forest offences including investigation and prosecution are pathetic. Regimental operations need refurbishing in terms of number and facilities for maintenance of physical fitness and efficient responses.
- A reserve of frontline staff needs be maintained for augmenting/ reinforcing the vacancies created by trainings, leave and delay in recruitment.
- Vigilance wing should have special investigation teams for dealing with crimes of heinous and sensitive nature, and those needing interstate co-ordination.
- Technologically advanced infrastructure will be critically helpful in this area with an adequate training back up.
- The required strategic reorientation is wanting in the protocols and procedures of the department. While standard assessment principles need to be re-inculcated, their treatment with modern methods of analysis (IT, computerization and data management systems) and evolution in light of the demands of the modern management. Back to inventories is the most critical factor of forest management, which can not be overlooked any more.
- Marketing management processes and skills need to be augmented accordingly. This can also be tried by integrating KFDC into marketing for the Government as well as the privately grown forest produce.
- The ecological resources outside the forest estate like river basins, watershed, wetlands, mangroves, sacred groves etc have been facing environmental stress due to the tragedy of commons.
- There is need of institutionalizing a close linkage between the custodian agencies of such resources and the department (Social Forestry Wing).
- Environmental impact including physical and biodiversity impact of any shift of practices (including diversions) needs to be assessed at every policy or

programmatic initiative and therefore, protocols for that will be essential. Thus a specialized policy analysis and assessment unit is essential at state level.

- Even Biodiversity Board of the state can be integrated within this domain. It may be seen that out of the 22 state biodiversity boards in the country, as many as 18 have forest officers, ex-officio or posted , as member secretaries.
- Management planning needs a special impetus in terms of inventories and their use in drawing management plans. Foremost area will be to refurbish the working plan units with skilled staff for statistical analysis, computer handling including GIS and data interpretation for facilitating management planning along with the modern infrastructure.
- The traditional system is the best as far as forest management is concerned. It needs to be seen that Forest Station system was a model for primarily forest protection based on increased staff strength and infrastructure. While that may be considered essential, for a better understanding and monitoring of the state of forest, the system of forest guards with beat maps divided into forest blocks with clear boundary and grids would be the best and practical.
- Environment department should be made a separate but parallel unit under the same department at Government level.
- There can be separate departments and top level positions can be made cadre posts of IFS as at present only forest personnel are formally trained in natural resource management and environmental conservation.
- As a principle, the department should maintain the management part of forestry research like genetic improvement programs, seed production areas, permanent preservation plots, resource surveys, inventory methods like developing yield and growth tables for various species of economic importance etc.
- Forest certification systems for sustainable forest management can enable the state to get a premium on prices by the clients engaged in export of produce to the countries requiring FSC or similar certifications/accreditations. The earlier system of maintaining custody chain through transit and property mark registered permit system, though obsolete now, has a specific importance in this context. Statutes might need a suitable overhaul to facilitate such changes.
- The Social Forestry wing needs to work on economic aspect of forestry outside forests.
- A strong technically healthy extension network, backed up possibly by an organized marketing support to the producers can be an important component of forest administration and can go a long way in strengthening agro forestry as a remunerative practice.
- For operational level plans, smaller management units are critically important. Present Divisions are just adequate for operational convenience. Regional/ landscape plans should cover only strategies and not operational aspects.

## **21. Sri. Justin Mohan IFS, Project Officer, Kuttanad Package**

- Every DFO shall have a 'striking force' similar to the 'Special Branch' operating in the office of the SP.
- Every Territorial CF shall be provided with a trained Veterinary surgeon to manage man animal conflicts within the circle.
- The Divisions shall be provided with modern tranquilizer & modern cages for capturing wildlife that venture into residential areas without causing damage to life and property within the shortest period.
- New areas for training.
- Capturing wildlife entering non forest areas.
- Depots can be designed in a more scientific manner which facilitates the public to move through the depot on vehicles and have a look at the lots and collect/transport them with ease. All depots should be provided with JCBs which will drastically reduce cost of transportation within the depot.
- Forest Department should take a lead role as consultants for raising trees by public and other entrepreneurs.
- It's a good idea to prepare working plans on a watershed basis.
- The DFOs should be provided with Financial officers who should be given cheque drawing powers.

## **22. Sri. P.K. Kesavan, Director, Ministry of Panchayathi Raj**

- There is a need to support staff in discharge of their official responsibilities as well as support their family life. For this purpose, KFD may consider setting up a society/ Charitable company.
- Part of the income of this organization will be from members/ beneficiaries contribution while Government has to be an important contributor.
- Driving 2-4 wheelers, unarmed combat, skills to manage the processes of democracy, conflict resolution, management of Co-operatives, Scientific investigation of cases etc, are some areas that require attention.
- Protection and management of forests and forest dependent communities should be made the first charge on the income from the forests.
- There is need to assess the value of clean air and clean water which are the most important ecosystem services of forests that can be priced. Efforts are required to charge royalty for their commercial use.
- Management of banks of all rivers that originate/ flow through the forests need be taken up by KFD, on priority.
- KFD should become the first option for employment to the forest dependant tribal for which appropriate changes in Recruitment Rules are to be made.