#### **GOVERNMENT OF KERALA**

Abstract

Forest - Report on Forest Policy and Management in Kerala -Recommendations of the High Level Expert Committee - Order issued.

-----

# FOREST ENVIRONMENT AND WILD LIFE (B) DEPARTMENT

G.O.MS.NO.1/87/ FE& WLD

Dated, Trivandrum, 7th January, 1987

Read:- 1. G.O.MS.5/84/AD dated 6.1.84

2. G.O.MS.45/86/FE &WLD dated 16.5.86

# ORDER

During the last three decades vast tracts of forest areas have been diverted for non-forestry purposes and also lost by way of encroachments. The remaining forests have undergone a qualitative change due to large scale planting programmes and various biotic factors. Further, in the pursuit of enhancing wood production and increasing the revenue of the Government, the interests of tribal people have been affected and the wild life habitat eroded. All these changes necessitated a re-examination of Forest policy.

2) Government have therefore, in their order first read above constituted a High Level Expert Committee under the Chairmanship of shri T. Madhava Menon, Vice-Chancellor, Kerala, Argricultural University with Sri A. Hassankutty, Retired Chief Conservator of Forests as Member Secretary and s/shri Harisingh, Prof: Y.M.L Sharma, K.K.Nair, Dr.C.T.S.Nair as Member, to review the existing forest policy and to recommend measures for protecting and conserving the forest wealth and to develop it on healthy lines.

The terms of reference of the Committee were:

- 1. To recommend a package of forestry practices in regard to the maintenance and management of all kinds of forests evergreen, moist-deciduous, man made etc.
- 2. To investigate into the scope for, and give recommendations on, diversification of forest plantations.
- 3. To recommend appropriate management practices in respect of production and supply of bamboos, reeds and cane.
- 4. To suggests ways and means of improving the production and supply of medicinal plants.
- 5. To suggest ways and means of improving the growing stock in industrial plantations for supplying committed quantities of raw materials to industrial undertakings.
- 6. To recommend ways and means of ensuring adequate and consistent supplies of softwood to organized and unorganized sectors of industry.

- 7. To suggest ways and means of increasing production of fuel wood to ensure consistent supplies for consumptions in households and traditional labour intensive like plantations, tile manufacture, brick manufacture etc.
- 8. To recommend a social forestry strategy that would be consistent with the agroindustrial practices of Kerala.
- 9. To study the scope for, and give recommendations on agro- forestry programmes and practices suitable for Kerala.
- 10. To investigate into the management of wild life and suggest ways and means of improving the same.
- 11. To take stock of the present status of forest research in Kerala and give recommendations in improving its quality and scale.
- 12. To suggest ways and means of supporting the welfare and economy of tribal communities in forests.
- 13. To study whether the existing departmental machinery is adequate for the effective protection of the forest wealth in the state, and if not, to suggest means to improve the same.
- 3) The High Level Expert Committee has submitted their study report under the caption "Forest Policy and Management in Kerala, The Committee has made 144 recommendations to commensurate with objectives. To examine the recommendations made by the High Level Expert Committee, Government in their order read as second paper above constituted an empowered Committee consisting of the following members:

Chief Secretary
 Agricultural Production Commissioner
 Secretary, Finance (Expenditure)
 Member
 Secretary, Science & Technology
 Member
 Land Use Commissioner
 All Chief Conservators of Forests
 Member
 Member
 Member
 Ohrief Conservator of Forests
 Convener

.. Joint Convener

The Empowered Committee analysed each item of the recommendations closely and submitted a report incorporating their decisions after detailed discussions.

8. Joint Secretary (Forests)

4)Government examined the recommendation of the High Level Committee and decisions of the Empowered Committee on the recommendations made by the High Level Expert Committee in detail and are pleased to issue the following orders in respect of 110 items.

#### EVERGREEN - SEMT EVERGREEN

- 1. Working, including selection felling etc. should not be permitted in the immediate vicinities of existing reservoirs. The extent and location of the immediate vicinity should be defined by the working Plan Officer from time to time taking into consideration the slope, the site characteristics of existing vegetation, the catchments particulars and the edaphic factors. Suitable modifications to the above effect will be made in the current working plan.
- 2. There should be no working at all in areas with more than. 45 digree slope. Steep areas will be identified, included under the protection working Circle in each forest divisions. If any deviation is necessary, the working Plan Officer should give specific recommendation.
- 3.In areas to be selection felled a regeneration survey should be carried out before felling commences, thus enabling the preparation of suitable regeneration maps. The regeneration of useful species in selection felling areas should be properly monitores and adequate precaution taken to avoid instruction or colonisation by unwanted species in the opening created by removal of trees by selection method. On no account large opening should be made in evergreen forests.
- 4.Gaps should be generated preferably with local indigeous species to restore the desired floristic compostion. Insrtensive tending operatios should be carried out in the entire felled area for the first three years and later inspected once in a year for such attention as may be required.
- 5.In the areas to be worked out under selection felling system the boundaries of the copies should be demarcated by erecting cairns and management maps should be prepared at the time, of the preparation of the Working Plan itself. The Working Plan should contain sufficent safeguardss to preserve valuable species and endangered species. The extraction of endengered species must be totally banned.
- 6. The data gaps should get highest priority in reserach. The work relating to collection of data on growth statistics will be entrusted to Kerala Forest Reserch Institute, Trichur.

### MOIST DECIDUOUS

- 7. The gaps created by selection felling be felling with the local species.
- 8.Moist deciduous forest should be strictly protected against fire and grading. Fire protection works should be carried out sufficiently early ie. before the beginning of summer season. Chief conservator of forests will move Government for sufficient funds for fire protection if required.
- 9. The selection felling system now being tried at konni, punalur and Nemmara Divisions should be closely monitored punalur and Nemmara Divisions should be closely

monitoed and research work should be undertaken to derive suitable parameters. If the results are encouraging this system should be tried in other areas adjoining evergreen type to prevent retrogration of the quality of evergreen forests.

# DRY DECIDUOUS

- 10.Dry deciduous forests should be treated as a potential area for regeneration with multipurposes species like Tamarindus indicus, Phyllanthus emblica, Albizia Mamara, Azadirachtaindica etc. Such areas may be planted with suitable species of that locality. Working Plan for that region should contain specific provisions.
- 11. The sandal bearing areas should be totally protected from the biotic factors and artificial regeneration of sandal should be carried out on a phased programme. The working plan should devote more detailed suggestion for management of sandal bearing areas. Research findings should be the basis for preparation of management principles in the sandal bearing areas.
- 12. In the sandalwood areas, along with strict protection against fire and grazing, research should be undertaken to find out methods for combating the spike disease.

### OTHER TYPE OF FORESTS

- 13.Other type of forests and grass lands should be effectively protected against forest fires. For protection against fire damage in grasslands, proposals for providing sufficient funds every year in the Budget will be sent by the chief Conservator of Forests. Grassland should also get priority and preservation as they are a biotic climate type forest of high elevation supporting sholas.
- 14.Extending plantation in grass lands should be undertaken only with utmost caution.
- 15. In Eucalyptus plantations where stocking is poor and where there is promising natural regeneration of miscellaneous species, the latter should be retained and protected.
- 16.Rosewood coming up in fire-damaged plantations should be subjected to study and protected as an effort to ensure their establishment.
- 17.Marshes and swamps occurring naturally in grasslands should be strictly protected as they regulate water-regimes.

#### PRODUCTION FORESTRY - MANMADE FOREST

### Teak plantations:

18.All cultural operations including thinning, climber cuttings removal of Loran thus, etc. should be done scrupulously following the calendar of operations. Proposals for providing sufficient funds to carry out these cultural operations, in the Budget will be sent, by the Chief Conservator of Forests.

- 19.In areas where performance of teak is not satisfactory, other hardwood species be planted wherever possible and such areas, after first rotation should be brought—under plantations of mixed hardwood species. A proper analysis of the reasons for low performance of Teak in plantations should be carried out and trial of judicious mixture of various tree species should be tried.
- 20.Boundaries of teak plantations should be planted with Bambax, Mahogany, Evodia, Ailanthus etc. in all places wherever possible.
- 21.As is the present practice bamboos and reeds should be planted along the river banks. Swampy areas in teak plantations should be planted with suitable species such as Lagerstroemia flosreginae, Terminalia tomentosa, Anthocephalus cadamba etc.
- 22. During thinning operations naturally occurring miscellaneous species not interfering with teak will be retained. This practice is already in existence.
- 23.to 25: The Working plan and Research Circle of the Chief Conservator of Forests will Conduct a detailed study of the year wise extent of Plantations in the State and work out a felling schedule to bring in normal age gradation in the second rotation of teak plantations in the whole of the state. This work should be taken up by the working plan and Research Circle. For this study the following points will also be taken into consideration.
- i). To ensure a sustained and regular yield, normally in age class distribution should be brought about by making necessary adjustment in area and rotation.
- ii). The tendency to reduce the rotation in good quality areas should be curbed. In poor quality areas where the aim is the production of small timber, pole crops, a shorter rotation can be adopted.
- iii)Guidelines should be prepared for the management of teak plantations based on the above recommendations. Until such time ie. till a decision is taken on the study report the existing practice will continue.

### **Eucalyptus Plantations:**

- 26.In grasslands along with Eucalyptus other pulpwood species should also be tried as a mixture.
- 27.In wild life Sanctuaries, no artificial planting should be adopted. By strict protection measures from fire hazards natural regeneration of home (indigenous) species should be encouraged.
- 28.In other areas the existing stock should be augmented by the intensive silvicultural operations, gap filling, application of fertilizers and protective measures. The Chief

Conservator of Forests will take steps for providing sufficient funds in the Budget for intensive Silvicultural operations for augmenting the growing stock.

29The absence of normal age gradation notice now should be rectified by making suitable adjustment both in area and cutting cycle taking into account the location of industrial units and distribution of plantations, providing a complete felling series of plantations to each of the three industrial Units (Hindustan Paper Corporation, Punalur Paper Mills and Gwalior Rayon's). Suitable proposals will be included in the Project Report for the proposed Joint Sector Undertakings.

- 30.Studies on the time and method of coppicing, stool mortality, coppice vigour, survival and productivity in successive rotation should be undertaken. The Research wing of the Forest Department will take up various studies on Eucalyptus Species.
- 31. High till age taungya like tapioca should not be allowed in Eucalyptus plantations.

## MATCH WOOD PLANTATIONS

- 32. Pure matchwood plantations of bomb ax ceiba should not be attempted as they have not succeeded in several places. Species such as Albizia falcatarda, Ailanthus triphysa etc. can be raised as pure plantations in suitable areas. As far as possible a judicious combination of various match mood species should be raised to avoid monoculture practice.
- 33.Intensive research is called for to produce genetically superior varieties of these three preferred matchwood species of the state. Studies should also be undertaken on methods of artificial regeneration of other naturally occurring suitable species such as Alstonia scholaris, Evodia roxburghiana, Machilus macarantha etc.

### **OTHER SPECIES**

- 34. The wattle and the pine plantations should be taken care of well and the possibility of extending them in grasslands in high elevations should be examined. Wattle should be encouraged wherever possible. Chief Conservator of Forests will propose in the Budget sufficient funds for raising varieties of tree crops in grasslands of high elevation.
- 35.Other hard wood species like Artocarpus hirsuta, Artocarpus integrifolia, Dalbergia latifolia, Gmelina arborea, Swietenia macrophylla, Terminalia tomantosa, Terminalia Paniculata, Lagerstroemia Lanceolata, ylia xylocarpa etc. should be planted in suitable areas both in the reserve forests and in vested forests. The existing hard wood plantations should be properly maintained by carrying out the required silvicultural operations.
- 36. For shade regulation in cardamom areas, as far possible only the manipulation of branches of the trees should be permitted.

#### MANAGEMENT OF BAMBOOS, REEDS AND CANES

- 37.Detailed resources surveys should be undertaken periodically to assess the stock of bamboos, reeds and canes. Such assessments should form an integral part of the preparation of Working Plans.
- 38.Regulating extraction by strict adherence to the felling rules should be an immediate task. The main problem stems from the poor supervision. Provisions in the bamboo extraction contracts should be redrafted with the objectives of ensuring that violation of felling rules are dealt with severely. The rules regulations should be strictly enforced by the field officers. A provision for termination of contract (Co-operative societies) should be included in the agreement and infringement to any clause should be strictly dealt with.
- 39.One of the main problems contributing to destruction of bamboos and reeds is fire. While fire protection should be strengthened as a general strategy of forest conservation specific attention should be given to bamboo and reed areas. To prevent the outbreak of fire, strict fire protection measures should be observed during extraction of these species.
- 40.Grazing is another important factor contributing to the destruction of bamboo resources. This is particularly serious during the early stages of regeneration. Protection measures should be strengthened immediately following flowering and seeding to ensure that regeneration is not adversely affected.
- 41. The technique of regeneration and management of bamboo has been perfected. Thereis considerable scope for extending the area under bamboo by planting reservoir margins, river banks and poor quality teak plantations. A long term programs should be initiated for artificial regeneration of bamboo. In the case of reeds and Canes, regeneration and management techniques are yet to be developed and this should be the thrust areas for research. Genetically superior varieties should be planted with the aid of Kerala Forest Research Institute

  Superior varieties of bamboos and canes from north-east regions of the country should be introduced for high yield. The advice of the Botanical Survey of India

  42.Cultivation of bamboos should form an important component of social and agroforestry programmes in the state. Extension works towards this aspect should be gerried.
- 42. Cultivation of bamboos should form an important component of social and agroforestry programmes in the state. Extension works towards this aspect should be carried out.
- 43Utilization aspects of canes have received very little attention; Detailed studies should be undertaken on preservation and processing so that can-based industry can be modernized. Treatment technique for longer life should be undertaken by academic sectors and research institutions.

# **MEDICINAL PLANTS**

44. Detailed Resources Survey should be carried out to :-

- a) identify the forest areas which are the natural habitat of medicinal plants.
- b) identify suitable areas and species for taking up further cultivation in Tribal settlements and
- c) assess the demand of the various medicinal plants in the market (both internal and external)

During the next Fiver year Plan, a detailed Project for raising useful medicinal plants in the forests should be prepared. Technical advice of I. C. A. R. should be suitably utilized and other technical institutions coordinated in the preparation of the project.

45.A detailed survey should be conducted to list out the medicinal plant species which are already extinct and which are on the verge of extinction and those which are still found in the forest, in collaboration with botanical Survey of India, Kerala Agricultural University and Kerala Forest Research Institute. Help of local tribes who have the knowledge about the folklore practice of medicines should be made use of in conducting the survey. While conducting the survey care should be taken for the correct identification of the plants.

46.Forest Department should encourage cultivation of medicinal plants in Tribal settlements by adopting a judicious system of incentives and subsidies and also arrange to collect, grade and market these items.

47.In order to produce and distribute good certified seeds to growers of medicinal plants, germs plasm collections and seed orchards of medicinal plants should be developed in different agro-climatic zones and a gene repository should be established to conserve genetic stock.

48. Forest dwelling tribes should be trained in correct identification of medicinal plants their collection.

### INDUSTRIAL WOOD SUPPLY

49.Improved logging tools should be used and selective mechanisation adopted for reducting the wastage and the logging and transport cost.

### FUEL WOOD SUPPLY AND SOCIAL FORESTRY

50. Suitable areas in the divisions in the erstwhile Malabar areas should be worked as fuel wood coupes. In other divisions degraded open areas inadequately stocked with tree growth and near population Centres should be planted with fuel wood species.

51. In rural areas away from forests a strategy for encouraging local production of fuel wood in home- steads and house compounds should be adopted as part of Social Forestry programme.

- In order to meet the fuel wood requirements of the urban population, Local Body authorities will identify areas suitable for fuel wood plantations and encourage tree planting in such areas by voluntary organizations.
- 53. In Social Forestry Programme seedlings of multi-purpose species like Mangifera indica, Artocarpus integrifolia, Tamarindus indica, Eugenia Jambolana, Azadriachta indica etc. Should be distributed to the public and planted in suitable areas by the Department.
- 54. Creation of the green belts, roadside avenues and recreational tree groves is graining ground. Ornamental tree of selected species should be planted for the bioaesthetic improvement of the urban areas. The local Bodies can constitute small functionary committees to carry out these works.
- 55. Shade giving trees should be planted in the parking places near Railway Stations and Aerodromes and in other public places.
- 56. The nurseries under social Forestry Programme should be raised on planned basis to produce seedlings of the desired species.
- 57. In view of the increasing need for seedlings, as many agencies as possible should be encourage to raise nurseries by given the necessary technical assistance and by buying back the seedlings at pre-fixed price.
- 58. The extension activity should not stop with distribution of seedlings and initiation of planting. This should also include assistance and advice on the maintenance and management of existing tree growth in the private compounds.
- 59. The high way Department or local bodies or voluntary organizations should look after the tree existing and being planted on the road side for better management.
- 60. A thorough mid-term evaluation of the present Social Forestry Programme should be done as contemplated in the Project document.
- 61. The Social Forestry Programme should be monitored by an independent body. Belt planting along coastal line should be undertaken by fishermen settling in that locality. They should be properly educated for raising timber species useful for fuel and for Catamarams.

### WILD LIFE MANAGEMENT

62. Special attention should be given for the habitat improvement in the forest. Planting bamboos and fruit bearing trees and promoting the natural regeneration of existing species developing more waterholes and providing more saltlicks come under this category. Chief conservator of Forests will move Government for sufficient funds for

habitat improvement works. 15% of the total plan outlay should be earmarked for wildlife conservation activities.

- 63. The sanctuaries should be more intensively managed by improving the mobility of staff by providing them with vehicles and other infrastructure.
- 64. Training of officers and staff in advanced concept of wild life Management at the suitable centers should be done in a phased manner.
- 65. More check posts, wireless stations and other infrastructure should be established in vulnerable points for better protection. Specially trained armed protection force should also be made available in all areas.
- 66. All sanctuaries and National Parks should be rigidly protected against fire by providing fire watch towards and fire fighting units with sufficient men and equipments in prone areas.
- 67. Grazing should be completely prohibited in the sanctuaries and restricted in the forests adjacent to them.
- 68. Wild life census should be taken in all the sanctuaries periodically.
- 69. There should be strong publicity machinery to produce popular literature and audiovisual materials on wildlife. Booklets, posters, Picture post cards, etc. should be printed and distributed at public meetings and seminars.
- 70. Guided tours should be organized in wildlife sanctuaries, preferably during summer holidays, which will provide opportunities for the visitors to understand the activities of the Forest Department in the management of Forests and wild life.
- 71. Kerala Forest Research Institute should intensify their research work in wild life management. The Forest Department should provide the institute all facilities and co-operations.
- 72. In plantations already established inside the sanctuaries, selection system should only be followed causing minimum disturbance to the wild life.

# FORESTS AND TRIBAL DEVELOPMENT

- 73. The Forest Act should be strictly enforced to exclude excessive access on non-tribals to tribal settlements as was done during the emergency period.
- 74. The Forest Department should play an active role in encouraging the enrolment of tribal children in various schools.

- 75. All tribal settlements should have their boundaries demarcated and defined with permanent cairns.
- 76. While fixing boundaries, the Department should also take into consideration the existing tribal population and their needs as well as their future demands consequent on the increase in population, the productivity of the areas, etc, and make allowances for the same.
- 77. Greater participation by tribal communities in afforestation and reforestation programmes should be sought and ensured by training, encouragement and a share in the proceeds of the ultimate cut.
- 78. The provisions of the wild life (Protection) Act should not be implemented in such way as to aggressively alienate tribal interests. Care should be taken to protect tribal persons and properties from wildlife and vice-versa. Concessions will be granted to the extent possible.
- 79. (i) The Forest Department should exhibit more concern for and confidence in the forest dwelling tribes so that their morale would be improved substantially.
- (ii) As a deliberate policy, the Forest Department should prefer tribal people for employment, especially in causal jobs arising in the locality itself.
  - (iii) Several welfare functions could and should be formally and informally discharged by the local forest officers.

The Departmental officers should involve themselves in all tribal welfare activities and exploitation by middle men should be totally avoided.

- 80. Much greater attention should be paid to the management of Minor Forest Produce as an instrument of tribal welfare.
- 81. Improvement and propagation of cardamom, pepper etc. Occurring naturally in the forest by tribal communities in order to increase their availability should be considered as commercial cultivation inviting the mischief of forest (Conservation) Act, 1980.
- 82. There should be better co-ordination between the Forest Department and the various other Department and agencies working for tribal welfare.
- 83. Forest officers should be appointed as project officers in sub-plan areas which encompass large forest tracts. Special range Officer/ Assistant Conservators of Forests should be appointed exclusively to look after Tribal Welfare activities in Divisions with sizable tribal population.
- 84. Consequential changes should be made in the Code and instructions regarding the preparation of working Plans in order to enforce attention to Tribal Welfare aspects when preparing future working plans.

### **FORESTRY RESEARCH**

- 85. The goals or missions to be achieved should be clearly identified and only those programmes and projects which directly and indirectly contribute to these goals should be undertaken. Immediate priorities in Production forestry, social forestry, environment forestry, socio-economic aspects of Forestry, etc. have been identified. A steering group will be formed to identify research programme on priority basis. Co-ordination of research activities taken up by each institute should be properly watched to avoid duplication of work.
- 86. There are several institutions involved in forestry related to research in Kerala. To avoid duplication, the activities should be coordinated and specific areas should be assigned to each.
- 87. Considering the complexity involved in multi-disciplinary research, management and administration of research should be reviewed and an approach which satisfies social accountability and scientific flexibility should be developed.
- 88. Fluctuations in research budget is an important factors which affects long term research. A system by which a part of the forest revenue is available for research and development should be evolved. Laying a research and developed cess on the sale value of forest produce will be useful.

### DEPARTMENTAL MACHINERY

- 89. A Conservator of Forests occupy a key position in the Organization, they should be equipped to discharge leadership and managerial roles by giving them specific professional responsibilities and by making them responsible for failure and lapses. The Board of Chief Conservators of Forests to draw up duties and responsibilities and powers of Chief Conservator of forests by 31.3.1987.
- 90. There should be a re-organisation of the jurisdictions in order to avoid:
  - a) The overlapping of territorial and functional jurisdiction.
  - b) The inadequate responsibilities at professional level and to ensure more efficient field inspections by senior officers and
- c) The over load on the 'beats' in order to enable the Guards and Foresters to be effective.
- 91. Re-deployment of the staff, wherever necessary should be made to rationalise the spread of responsibility and the extent and natural of jurisdiction. The Board of Chief Conservator of Forests should submit proposals regarding this by 31.3.87.
- 92. The existing arrangements whereby the Assistant Conservators of Forests attached to the Divisions reporting directly to the Conservators of Forests by the Divisional Forest officers should be stopped.

- 93. Implementation of planting schemes under various projects have to be undertaken by various Units of staff. For example, projects under World Bank Scheme should be carried out by the staff sanctioned under that scheme. Territorial staff should be aware of the activities carried out under various Projects in their territorial jurisdiction.
- 94. In Revenue District where there are large numbers of Divisions, the Conservators of forests should be empowered to designate Forest Officer as the spokesman of the Department in the District level Bodies.
- 95. A planned programme of training and re-training at all levels from Chief Conservator of Forests to Forest Guards should be implemented. Detailed training scheme for officers other I.F.S. officer will be drawn up by Chief Conservator of Forest.
- 96. IN Divisions where encroachment is widespread and the threat persists, the projection staff should be specifically earmarked for this purpose without additional obligations. A reorganization of beats sections etc. will be prepared and also a working scheme for better Protection of Forest wealth will be prepared by the Chief Conservator of Forests for approval of Government.
- 97. More sophisticated equipment like walkie-talkie, vehicles, weapons etc. should be provided to the provided to the protective staff for the effective protection of the forests.
- 98. The existing roads, quarters, inspection bungalows, check posts, offices etc. should be re-developed and fresh facilities provided on a time-bound schedule.
- 99. The large number of disciplinary cases pending for years should be quickly disposed of boost the morale of the staff. The disciplinary cases should be finalized within the stipulated time. The disposal will be monitored closely by

  Government.
- 100. All officers of the Department should reside at their respective headquarters itself as itself as stipulated in the Rules. The senior officers should set example by camping in the forest areas. Conducting frequent inspections and generally keeping up the high and historic traditions of the Department. Detailed instructions will be issued by Chief Conservator of forests. Violations should lead to immediate punishment.

# **POLICY PARAMENTERS**

- 101. The decision already taken by the Government to evict all encroachment after 1.1.1997 should be strictly implemented.
- 102. The disturbed eco-system in the Cardamom Hill Reserve should be restored by large scale plantings under the social forestry programme.

- 103. The Department should take stock of the pendency of forest cases and institute separate Prosecuting agencies, wherever necessary.
- 104. Disciplinary follow up to check delays by Departmental subordinates should be tightened.
- 105. The Department should call for suggestions from the officers of the Department, and the Legal Experts and take immediate steps to remedy the imperfections in the various Acts and Rules, which govern the working of the Department and also in the 'Agreement Conditions' for executing works. A group of officers to be appointed by Chief Conservator of Forests and detailed proposal should be submitted to Government by 31.3.87.
- 106. The survey and demarcation of forest boundaries and construction of permanent cairns should be completed, on a top priority basis, based on a time bound programme. A well equipped cartographic unit should be established in the Chief Conservator's office to prepare and periodically update the maps of Divisions, Ranges, Sections and Beats. Detailed proposals will be made by Chief Conservator of Forests for inclusion in the plan.
- /107. A comprehensive resources survey should be done once in every five years. This should be the specific responsibility of the Conservator of Forests (Working Plan and Research Circle).
- 108. The Deputy Conservator of Forests should be responsible for the actual preparation of the working plan. The Assistant Conservator of Forests and the attached staff should assist the working plan officer in field works and for collecting data for a particular division.
- 109. Considering that the working plan period is generally ten years, it should be synchronized with two successive Five Years Plans either by extending or cutting short the terminal year/years of the Working plan or by providing with two or three annual Plan of operations.
- 110. There should be a separate manual for the Preparation of the working Plans Consistent with the changed Circumstances. Government of India has issued certain guidelines in the matter. The guidelines should be strictly adhered to.
- 111. Electronic data processing system should be made use of to the maximum extent for ensuring accuracy and consistency of the data base for working plans.
- 5. Separate orders will follow in respect of the remaining recommendations of the High Level Expert Committee.

# N. KALEESWARAN Agricultural Production Commissioner and Secretary (Forest)

To

All the chief Conservator of Forests.

All the conservator of Forests.

All the Divisional Forest Officers.

The Accountant General (Audit) / (A & E)

The Finance Department.

The Local Administration Department.

The S.C & S. T. D. Department.

The Revenue Department.

The Irrigation Department.

The water & Power Department

The Public works & Transport Department.

All the Sections of Forest Department.