ANNUAL REPORT OF THE FORESTRY DEPARTMENT FOR THE YEAR 2000

GENERAL

Progress in forestry development continued at a high rate during the year under review. All the targets set for the year, the main of which were the following, were achieved:

- Protection of the forests, especially against fires.
- Reforestation of burnt and other bare areas.
- Conservation and protection of nature, especially in forest areas.
- Production of timber and other forest products, seeds and seedlings.
- Tending of forest stands.
- Rational management of the forests.
- Forest education.
- Forest research.
- Improved and more effective management and protection of the forests through the following engineering activities:
 - Maintenance, improvement and expansion of forest roads, telecommunications and buildings.
 - Purchase of new machinery and equipment and maintenance of the existing ones.
- Expansion of computerised methods in data recording and processing.
- Public recreation through the creation of National Forest Parks and the establishment, expansion and maintenance of picnic and camping sites.
- Establishment and maintenance of Nature Trails.
- Protection of flora and fauna.
- Conservation of Nature Monuments.
- Provision of employment to the inhabitants of forest villages.
- Harmonisation with Acquis Communautaire.

2. EXPENDITURE

With a view to achieve the above targets £11.829.679 were approved in the Budget for the year 2000. The total amount spent out of the Budget was £10.386.623 (i.e. about 87,8%).

3. REVENUE

Apart from the non-wood benefits from the forests, that their monetary valuation is difficult, an amount of £1.643.698 was collected by the Forestry Department as revenue in 2000. An additional amount of £72.434, out of which £3.855 represents forest products sold on credit and the rest (£68.579) lease of forest land, is still to be collected.

4. FOREST PROTECTION

The protection of existing forests against fires, especially during the prolonged dry and hot summers, is the principal concern of the Forestry Service. The following fire protection measures were taken during the year under review:

- a) A Fire Fighting Task Force consisting of 140 members was in operation. Its members were employed on various forest operations at strategic points in the forest, being at the same time on call at any time through radio telephone.
- b) During the summer months fourteen Fire Look-Out Stations, found on high peaks in the forests, were manned in order to detect and report forest fires.
- c) About 6,94 km of forest roads were constructed and 70,99 km were widened or improved. In addition 11,32 km of vehicle tracks and 37,27 km of extraction roads were constructed, which serve also as fire traces.
- d) Three water tanks, one at Troodos Division, one at Pafos Division and one at Nicosia Division were constructed and fourteen new hydrants were installed on pipes which pass through the forest and on water tanks, to supply water in the event of a fire, to the Departmental fire engines.
- e) Daily mobile patrols in the forest, especially along the delimitation line, were carried out throughout the summer months, warning and advising villagers and others against forest fires.
- f) The "Save our Forests Week" which was initiated in 1985 was celebrated again in May 2000. In addition a "Save the Forests Day" was celebrated in all schools of Cyprus, in co-operation with the Ministry of Education and Culture.
- g) Lectures on the prevention and suppression of forest fires were given to the National Guard, the Police and the public. Also extensive publicity was made through the various mass media.

- h) The mechanisation for the extinction of forest fires, was successfully continued. At present, the Department has at its disposal 32 fire engines, 20 fire patrolling vehicles and 103 fire pumps of various types.
- i) In spite of the measures taken in 2000, 23 forest fires broke out (6 were caused from lightning) and burnt a forest area of 334 ha. Most of the fires were put under control almost immediately after they broke out; the largest of them occurred at Akapnou (Limassol Forest) and burnt an area of 200 ha. Another large fire was the one started near a guardhouse of the Turkish occupied forces at Lefka area and burnt an area of 120 ha.

Also the Department assisted in the control of 92 fires in private and government lands especially those endangering the state forests. Those fires burnt an area of about 6 730 ha.

Furthermore the Forestry Department started the preparation of a Plan to protect rural areas against fires. The Plan includes Prevention, Detection and Presuppression measures and is expected to be completed next year.

The usual protection measures were taken against illicit grazing and other offences, which were limited.

Spraying from the air was continued during the year under review against the pine Processionary caterpillar, using <u>Bacillus thurigiensis</u> and <u>Dimilin</u>.

5. REFORESTATION

An area of 242 ha was reforested, while an area of 59 ha which was cultivated will be sown or planted in 2001. The total amount spent on reforestation was £214.118.

Reforestation was not only carried out in Pafos, Troodos, Adelfoi, Limassol and Machairas forests but also in other bare areas such as Oreites, Agia Napa, Sotira, Potamos tou Liopetriou, Archaggeloudi I, Larnaka Salt Lake, Athalassa, Agios Nikandros, Xylotymvou, Rousamoutti C, Larkona 2, Profali 1 and 2, Strofiggas, Tala and Akapnou.

Nine bulldozers were employed almost continuously for ground preparation, one of which was Menzi-Muck suitable for climbing and working on steep slopes and a big number of labourers were also employed for planting and sowing.

6. TIMBER PRODUCTION AND DISPOSAL

During the year under review timber extraction and supply to local wood industries continued in a satisfactory way.

A volume of 16 811 m³ R.O.B. of timber was extracted from various state forests and sold to the Cyprus Forest Industries Co. Ltd. (C.F.I.), and to private individuals, for the production of constructional timber, chipboard, box-shooks etc. Out of the above volume, a quantity of 16 643 m³ R.O.B. was stemwood and 168 m³ R.O.B. was branchwood which was sold to the C.F.I. for the production of chipboard. The revenue of the Department from timber sales was about £376.994. Furthermore, timber valued at £3.855 was sold to the Cyprus Forest Industries Co. Ltd., on credit.

In addition to the above, timber equivalent to 6 227 m³ R.O.B. was extracted as firewood from the state forests and an amount of £53.449 was collected.

The Forestry Department issued 31 sawmill permits during 2000.

7. FOREST MANAGEMENT

a) The Forestry Department with the assistance of FAO experts completed in 1999, the preparation of a "National Forest Programme" for Cyprus Forests which covers the ten year period, 2000-2009.

The main objectives of the Programme are:

- The forest development,
- The forest management on a sustainable basis,
- The rational and prudent multiple use of forests and
- The harmonization of Forest Policy with that of European Union.

The Programme consists of the following three parts:

- I. The Strategy.
- II. The Projects and Activities
- III. The New National Forest Policy Statement which will replace the previous official policy statement.

By the beginning of 2000, the National Forest Programme was submitted by the Ministry of Agriculture, Natural Resources and Environment to the Council of Ministers for approval.

The Council of Ministers appointed a Committee of Representatives from various Ministries and Governmental Organisations for further study because some of the suggested Projects and Activities lie in the competence of other Ministries / Departments.

b) During 2000, a total of 24 permanent sample plots in young plantations of <u>Pinus brutia</u> found in Pafos and Adelfoi Forests were re-measured for growth studies. Various parameters such as volume, mean diameter,

mean height, mean height of usable timber etc. will be calculated in 2001 with the aid of a computer.

- c) In 2000, another two computers were received. At the end of the year the Department had at its disposal sixty three computers as well as a sufficient number of programs used effectively in a different number of applications.
- f) During the year, 1 103 ha of forest land were leased for Agricultural and Animal husbandry purposes. By the end of the year twenty three quarry licenses and two mining licenses were in force in state forests.

8. SILVICULTURE

During the year under review, emphasis was given to the watering and other silvicultural treatments of plants planted on an area of 101 ha, especially in the plains, spending a significant amount from the funds available for silviculture. Silvicultural operations (thinning, cleanings, etc.) were carried out in an additional area of about 1 310 ha. The total amount spent was £134.439.

The seed collected during the year, together with the stock from last year, was adequate to cover both the Departmental needs and requests for export. A quantity of about 1 270 kg of seed was collected at a total cost of £15.507. A quantity of 16,00 kg was exported at a revenue of £316.

The production of seedlings in the Departmental nurseries was adequate. A number of 384 737 seedlings were raised compared to 369 902 in 1999. The seedlings produced in 2000 plus the stock of 1999 amounted to 1 127 360. Out of the total quantity, 87 403 were used Departmentally, 191 541 were sold to the public or other Government Departments, and 52 009 were issued free of charge to schools, village authorities and other organizations and institutions for planting on public or communal lands. Also, 21 210 plants were issued free of charge to private individuals for forestation of privately owned properties.

9. FORESTRY EDUCATION

The Cyprus Forestry College completed in 2000 its 49th Academic year. Six Cypriot students, obtained their Diploma in Forestry. The six-month Post-Diploma course was not organised because there were no candidates from abroad.

The 50th Academic year began on the 1st October, 2000 with a complement of 13 students out of whom 9 were Cypriots and 4 from other countries.

A number of officers of the Department participated in various international Conferences, Seminars etc. and another number of officers attended educational programmes both in Cyprus and abroad.

Also the Department organized at the Cyprus Forestry College Refresher Courses on various topics for the training of the Forestry Department Staff and a large number of officers participated. Furthermore ten Cypriot foresters under the European Union Programme "Leonardo da Vinci" participated in a three month study visit, seven to U.K. and three to Finland.

10. FORESTRY RESEARCH

Forest Research and Publicity were continued on the same lines as in past years, against an expenditure of £27.743.

In summary, research dealt with the production of genetically improved seed of Brutia pine, the maintenance and improvement of the Arboretum and Tree Bank, and with protection of forests against insects and diseases.

11. NATURE CONSERVATION

The Department of Forests during 2000 contributed greatly towards the effort undertaken by the Ministry of Agriculture, Natural Resources and Environment for Nature Conservation, through various activities, the main ones being the following:

- a) The Department intensified its efforts through the organisation of lectures, voluntary work, ceremonies and speeches through radio and T.V. for expansion of tree planting and protection of Nature.
- b) During the year under review the construction work for Athalassa Environmental Information Center was continued. As regards the Troodos Environmental Information Center, the Department carried out some preliminary work concerning the necessary equipment, exhibits and the information that would be available. This Center is expected to start functioning next year.
- c) The effort for the study, protection and systematic recording of the Cyprus indigenous and endemic plant species which was initiated in 1987 was continued. The collection of specimens for the completion of the Botanical Collection in the Department was also continued.
- d) The efforts to spot and protect Tree Monuments were intensified. For the maintenance and protection of Tree Monuments an amount of £1.226 was spent.
- e) During 2000, the effort for the systematic recording of the Cyprus indigenous and endemic mushrooms as well as the collection of specimens for the creation of a mushroom herbarium in the Department initiated in 1998, was continued.

- f) In May 2000, an area of 26 ha at Agios Nikandros State Forest was declared by the Council of Ministers as a National Forest Park.
- g) The Department participated actively in the execution of a project under the "LIFE" programme aiming at the harmonisation with European Union Directive 92/43. And, more specifically, the work concerns with the inventory/mapping of the areas that would be proposed to be included in the European Network of Protected Areas "Natura 2000". The project is expected to be completed next year.
- h) The effective protection of the Cyprus moufflon (Ovis gmelini ophion) continued and the animal remains on the increase.

12. FOREST RECREATION

An amount of £127.115 was spent for the creation, improvement and extension of picnic and camping places. In addition £117.509 were spent for the maintenance and cleaning of the picnic and camping places within the forests.

In 2000, the work started in 1991 for the implementation of the Development Plan for the entire Athalassa National Forest Park was continued.

Furthermore during 2000, the work for the execution of the Development Plan for the Rizoelia National Forest Park was started. The Plan was finalized through consultations with other interested Government Departments and Services, Local Authorities and non Governmental Organizations.

Also, during the year under review, the work for the execution of the Development Plans for the Paedagogical Academy, Troodos and Polemidia National Forest Parks was continued.

The total amount spent for the establishment, development and maintenance of National Forest Parks during 2000 was £311.027.

A path of a length of 1,00 km at a cost of £2.167 was constructed in Machairas Forest, locality "Kakotzefalos", from Departmental Funds. Furthermore, one new Nature Trail at Madari (Selladi Karamali) of a length of 2,30 km and one at Kionia of a length of 1,20 km were constructed, and the work for the completion of Prodromos Nature Trail which started in 1998 was continued. Also, two paths for paraplegic persons were constructed, one at Kampos tou Livadiou of a length of 1,60 km and one at Mandra tou Kampiou of a length of 0,80 km. In addition during the year under review, two sections of the European Long Distance - Path No. 4 were constructed, one at Stravarkaka and one at Mnimata ton Piskopon of a length of 1,60 and 2,00 km respectively. The total cost of £20.932 was defrayed by the Cyprus Tourism Organisation.

For the maintenance and improvement of Nature Trails and Paths constructed in state forests an amount of £30.873 was spent.

All the Nature Trails and paths constructed by the Department of Forests within and outside the State Forests attracted the interest of many walkers from Cyprus and overseas.

13. FOREST ENGINEERING

a) Forest Roads

The construction of new forest roads and the improvement of existing ones, constitutes an important aspect of the work of the Department, as roads serve on the one hand forest protection, tending and exploitation and on the other hand tourism and communication between forest villages.

During the year under review the following new roads and tracks were constructed:

- 6.94 km of forest roads at a cost of £167.024.
- 11,32 km of vehicle tracks at a cost of £26.107.
- 37,27 km of extraction roads at a cost of £136.054.

Furthermore 70,99 km of road widening or improvement was carried out and 17,00 km were asphalted at a total cost of £1.450.794.

The total length of the asphalted forest roads by the end of the year was 69,58 km.

In addition 1 418 km of roads, 836 km of vehicle tracks and 1 103 km of extraction roads were maintained at a cost of £227.765.

The total mileage of the forest road network by the end of 2000 was 1 424,78 km of forest roads (including asphalted roads), 847,64 km of vehicle tracks and 1140.44 km of extraction roads.

b) Forest Telecommunications

The Forestry Department maintains a well-organised telecommunication network for proper forest protection and management. An amount of £45.258 was spent for its maintenance and an amount of £15.808 was spent for its extension and improvement. This telecommunication system at the end of 2000 included the following:

- 368,37 km of telephone lines
- 372 telephone instruments
- 15 cellular telephones

- 6 telephone switch-boards
- 20 V.H.F. radio links
- 1 V.H.F. control station
- 360 mobile radiotelephones
- 450 portable radiotelephones
- 5 radiotelephone repeaters.

c) Forest Buildings

During the year under review, a new house at Kapoura Forest Station was built and two sheds, one at Platania Forest Station and one at Forestry College were constructed. Also, major improvements were carried out at Gialia, Lysos, Kampos, Platania and Kapoura Forest Stations, and on one room at the Forestry College against a total expenditure of £45.558

Usual repairs and maintenance were carried out to various forest buildings, at a cost of £114.695. Equipment for various forest stations was purchased at a cost of £15.860.

d) Machinery and Plant

During 2000 minor machinery and equipment of a value of £34.447 was purchased. For the running and operation of the machine-shop at Athalassa an amount of £67.647 was spent. Furthermore, an amount of £167.435 was spent for the maintenance and operation of motor transport.

The Forestry Department received during the year a new bulldozer.

14. PROVISION OF EMPLOYMENT TO FOREST VILLAGES

Under the socio-economic policy of the Government, which is implemented also through the activities of the Department of Forests, employment was provided to the inhabitants of forest villages. The total employment offered to both casual and regular employees was 86 580 work days.

Besides the labourers employed directly by the Forestry Department, an additional number of woodcutters was self-employed through tenders or otherwise, in felling and transport of raw-material from the forests to various forest industries, at a total of about 4 608 work days.

Furthermore a large number of technicians and labourers was self-employed through the policy for tenders for the execution of various forest works such as, construction of forest roads, maintenance of forest buildings, establishment and

maintenance of roadside plantations, maintenance and cleaning of picnic and camping places etc.

15. HARMONISATION WITH ACQUIS COMMUNAUTAIRE

During the year under review the progress made towards harmonisation with acquis communautaire was significant particularly as regards preparatory work. The most important measures were :

a) Classification of the wood in the rough, (Directive 68/89)

An amendment of the Forest Law to transpose the Directive on the classification of the wood in the rough has been drafted and sent to the Law Office for legal vetting.

b) Protection of forests against atmospheric pollution, (Regulation 3528/86)

Eighteen Level I plots have been selected to monitor the effects of atmospheric pollution and other biotic and non-biotic factors on forests.

c) Protection of forests against fires, (Regulation 2158/92)

During the year under review, the Department started the preparation of Plans, in accordance with Regulation 2158/92, to protect rural areas against fires.

16. ACKNOWLEDGEMENT

Warm thanks are expressed to all Ministries and Government Departments for their close co-operation and to the Fire Service, the Police, the National Guard, the U.N. Force in Cyprus, the British Military Bases, the Cyprus Telecommunications Authority, the Boy-Scouts, the Girl Guides, the Cyprus Forestry Association and to all other Organisations and individuals for their kind assistance to the Department of Forests.

Warm thanks are also expressed to the Government of Greece and the Commonwealth Secretariat for the scholarships awarded to overseas students to study at the Cyprus Forestry College. Last but not least, warm thanks are expressed to all the Forestry Staff, for their hard-work, zeal and devotion to duty and for their close co-operation, without which none of the targets and objectives of the Department could have been achieved.