ANNUAL REPORT OF THE FORESTRY DEPARTMENT FOR THE YEAR 1989.

SUMMARY

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 forest, 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 crops.
- -- Rational management of the forests.
- --Forest education.
- --Forest research.
- --Application of forest engineering with a view to:
 - --Maintain, improve and expand the forest roads, the forest telecommunications and forest buildings.
 - --To secure new machinery and equipment and to maintain the existing.
- Initiation of computerised methods in data recording and processing.
- --Public recreation through the creation of 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 forest villages.

EXPENDITURE

With a view to achieve the above targets £2,501,275 and £1,604,600 were approved in the Ordinary and Development Budgets respectively. The total amount spent out of both Budgets was £3,961,340 (i.e. about 96.5%)

REVENUE

Apart from the indirect benefits of the forests, which cannot be calculated in terms of money, an amount of £1,193,012 was collected by the Forestry Department as revenue in 1989. An additional amount of £142,573 representing forest products sold on credit is still to be collected.

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) Fire Fighting Task Force consisting of 90 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 thirteen Fire Look-Out Stations, found on high peaks in the Forests were manned on a 24-hour basis, in order to detect and report forest fires.
- c) About 2.65 kms of forest roads were constructed and 6.10 kms were widened. In addition 5.55 kms of vehicle tracks and 28.24 kms of extraction roads were constructed, which serve also as fire traces.
- d) Two water tanks, one at Panayia Division and one at Troodos Division were constructed during the year under review.

Five 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 1989. In addition a "Save the Forests Day" was celebrated in all the schools of Cyprus, in co-operation with the Ministry of Education.
- 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 8 fire engines and 54 fire pumps of various types.
- i) In spite of the measures taken in 1989, 19 forest fires broke out and burnt a forest area of 14 ha. It's worth mentioning that the year under review was the best year with the smallest area burnt since records are kept, i.e. 1885. All fires were put under control almost immediately after they broke out; the largest of them, which burnt an area of 4 hectares was started at Koronia area near the buffer zone.

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 Prosessionary caterpillar, using Bacillus thurigiensis.

REFORESTATION

An area of 642 ha was reforested, while an area of 388 ha which was cultivated will be sown or planted in 1990. The total amount spent on reforestation was £376,520. Reforestation was not only carried out in Paphos, Troodos, Adelphi, Limassol and Macheras forests but also in other bare areas such as Orites, Vouyies, Megali Moutti, Sotira, Lourka I,II, Xylophagou, Moutti tou Ziou, Stavrovouni, Athalassa, Paedagogical Academy Forest, Kakoradjia A, Carris IX,X,XII Pikrasidhi and Chorteri.

Eighteen (18) bulldozers were employed almost continuously for ground preparation, three (3)of which were Menzi-Muck suitable for climbing and working on steep slopes and a big number of labourers were also employed for planting and sowing.

FOREST EXPANSION

During 1989, the work of the Expansion Division was continued. Thus an area of 10.1 ha found at Kornos, namely Pikrasidhi, was declared as Main State Forest.

At the same time the procedure of bringing under forestry more lands, covering an approximate area of 2,325 ha found in Larnaca, Limassol, Paphos and Nicosia districts, is nearing completion. These areas are derelict and dry and will be afforested as soon as possible, for purposes inter alia of recreation, amenity and environmental amelioration.

A further area of 1,145 ha is under study for declaration into Main State Forests.

TIMBER PRODUCTION AND DISPOSAL

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

A volume of 46,591 m3 R.O.B. of timber was extracted from various State Forests and sold to the Cyprus Forest Industries Co. Ltd., and to private individuals, for the production of constructional timber, chipboard, box-shooks etc. An amount of 2,582 m3 R.O.B. of branchwood transported to C.F.I., is included. The revenue of the Department from timber sales was about £831,631. In addition timber valued at £80,323 was sold to the Cyprus Forest Industries Co. Ltd., on credit.

The Forestry Department issued 46 sawmill permits during 1989.

SILVICULTURE

During the year under review, among other silvicultural treatments, attention was given to the watering of plants (122 ha), especially in the plains and most of the funds for silviculture were spent for this purpose. Additionally an area of about 498 ha was treated silviculturally (thinnings, cleanings etc). The total amount spent was £67,507.

Although the year under review was not a good seed year, the collection of the year with the stock of seed from last year, was adequate to cover the Departmental needs and requests for export. A quantity of about 2,939 kgs of seed was collected at a total cost of $\pounds 7,912$. A quantity of 18.85 kgs exported at a revenue of $\pounds 373$.

The production of seedlings in the Departmental nurseries was adequate. A number of 479,884 seedlings were raised compared to 440,188 in 1988. The seedlings produced in 1989 plus the stock of 1988 reached 809,170. Out of the total quantity 162,043 were used Departmentally, 235,529 were sold to the public or other Government Departments, and 42,618 were issued free of charge to schools, village authorities and other organizations and institutions for planting on public or communal lands. Also, 23,194 plants were issued free of charge to private individuals for forestation of privately owned properties.

FOREST MANAGEMENT

a) During 1989, a total of 30 permanent sample plots in young plantations of <u>Pinus brutia</u> found at Paphos Forest were re-measured for growth studies. With the help of a computer the total volume both R.U.B. and R.O.B. of each sample plot, the mean diameter, the mean height etc. will be estimated in 1990.

- b) The Forestry Department received during the year under review another computer from the Data Processing Services. The Department has at its disposal six computers as well as, a sufficient number of programs which are used very effectively.
- c) During the year, 1,324 ha of forest land were leased for Agricultural and Animal husbandry purposes. Three prospecting permits, ten quarry licences and four mining licences were issued in State Forests.

FORESTRY EDUCATION

The Cyprus Forestry College completed in 1989 its 38th Academic year. Three Cypriot and six foreign students, obtained their Diploma. Two six-month Post-Diploma courses were also organised and seven candidates from abroad obtained the Higher Diploma in Forestry. The 39th Academic year began on the 2nd October, 1989 with a complement of 20 students out of whom 15 were Cypriots and 5 from other countries.

A group of students from Bochum-Ruhr University (West Germany), visited Cyprus and were given lectures on Forestry for one day at the Forestry College. Another group of students from the Forestry Institute of the Oxford University visited Cyprus Forests on a study tour. Also a group of students from Finland visited the Cyprus Forestry College and they were informed on the College's activities.

A Seminar on "Forestry in Modern Society" was organised in Nicosia by the Forestry Department between 27 and 30 November 1989. Participations included foresters from Cyprus and Greece as well as two professors of the Forestry School Salonica University.

The main aim of the Seminar was, though the exchange of knowledge and experiences, to study and outline the role and functions of the Cyprus Forests in the contemporary Society. The Seminar was very successful in providing useful conclusions for the rational management of the Island's forest resources.

A number of officers of the Department participated at various international Conferences, Seminars etc.

FORESTRY RESEARCH

Forest Research and Publicity were continued on the same lines as in past years, against an expenditure of £5,482.

In summary, Research dealt with forest genetics for production of good quality seed through the establishment of Seed Orchards, with Tree Banks and Arboreta and with forest protection against insects and fungi.

NATURE CONSERVATION

The Department of Forests during 1989 contributed greatly towards the effort undertaken by the Ministry of Agriculture and Natural Resources 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) The consultations with all other interested Government Departments and Services for the finalization of the Provisional Management Plan for the Cavo Greco area, which was prepared in 1987, were completed. The agreed Plan was forwarded to the Local Authorities and other non Governmental Organization for views.
- The attempt for the study and protection of Cyprus indigenous flora which was initiated 1987 in During the year a new endemic species was continued. found by a Forest Official at Akamas. The plant was endemic of Cyprus with the new а identified as co-operation of the Forestry Department, the famous Botanist Mr. R.D. Meikle and the Kew Gardens of London. It has been further agreed that the new species should be named as Centaurea akamantis. 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. A number of trees within the State Forests as well as a giant oak tree at Kato Pyrgos were maintained at a cost of £2,641.
- e) A study was prepared for the rehabilitation of the Asbestos mine area through the establishment of green cover.
- f) In co-operation with the Water Development Department and Nature Conservation Service an "Environmental Impact Assessment" study was prepared for the planned dam at Elia river near Kapoura area.
- g) The effective protection of the Cyprus moufflon (Ovis ammon orientalis cyprius) continued and the animal is now on the increase.
- h) The Forestry Department, in close co-operation with other Government Departments and Services, continued the application of various necessary measures for the protection and proservation of the Vulture (Gyps fulvus) in Cyprus.

FOREST RECREATION

An amount of £39,371 was spent for creation, improvement and extension of the picnic and camping places. In addition £34,699 were spent for the maintenance and cleaning of the picnic and camping places within the forests.

A Development and Management Plan was prepared for the Ayios Georgios area of Athalassa National Forest Park. The Plan was finalized through consultations with all other interested Government Departments and Services, Local Authorities and other non Government Organizations. The works for the implementation of the Plan started in 1989 and an amount of £31,375 was spent. It is expected that the whole Plan will be completed in 1990.

A Provisional Management and Development Plan was prepared for the entire Athalassa National Forest Park and was submitted to the Ministry of Agriculture and Natural Resources for further action.

The Forestry Department established a Nature Trail at Madhari Forest of a length of 3.98 kms. The cost £6,009 was defrayed by the Cyprus Tourism Organisation. The four Nature Trails at Troodos, the two at Akamas, the one at Cavo Greco, the two at Stavros tis Psokas, the one at Xyliatos Dam and the one at Madhari attract many walkers from both Cyprus and abroad.

A group of three Government Officials, among them the Director Department of Forests, visited the Federal Republic of Germany in November, as official quests of the German Government, in order to see on the spot the various activities, regarding the design, management and administration of the Forest Parks.

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 work was carried out:

- -- 2.65 kms of forest road at a cost of £ 9,492.
- -- 5.55 kms of vehicle tracks at a cost of £14,780.
- -- 28.24 kms of extraction roads at a cost of £104,707.

(A total of 12.24 kms constructed by private contractors within the felling coupes are inlcluded).

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-- 6.10 kms of road widening at a cost of £9,325.

In addition 1,342 kms of roads, 645 kms of vehicle tracks and 597 kms of extraction roads, were maintained at a cost of \pounds 82,483.

The total mileage of forest roads by the end of 1989 was 1,345.09 kms of forest roads, 650.44 kms of vehicle tracks and 625.15 kms of extraction roads.

b) Forest Telecommunications

The Forestry Department maintains a well-organised telecommunication network for proper forest protection and management. An amount of £39,454 was spent for its maintenance and an amount of £6,604 was spent for its extension and improvement. This telecommunication system at the end of 1989 consisted of the following:-

- -- 407.91 kms of telephone lines
- -- 413 telephone instruments
- -- 9 telephone switch-boards
- -- 18 V.H.F. radio links
- -- 4 V.H.F. control stations
- -- 221 mobile radio telephones
- -- 261 portable radiotelephones
- -- 4 radiotelephone repeaters.

c) Forest Buildings

During the year under review a new Fire Look-out Station was erected at Kavallos (Kambos Division) as well as one shed at Panayia Forest Station. Also, major improvements and extention were carried out on the offices at Yialia Forest Station against a total expenditure of £14,749.

Major improvements were carried out on Saittas Forest Station, on the machinery workshop at Athalassa and the canteen at Stavros Psokas as well as usual repairs to other forest buildings, at a cost of £21,376. Equipment for various forest stations was purchased at a cost of £3,834.

d) Machinery and Plant

During 1989 minor machinery and equipment of a value of £5,587 was purchased. For the running and maintenance of

all Machinery and Vehicle (including fuel and lubricants but excluding the wages of drivers) an amount of £202,631 was spent.

PROVISION OF EMPLOYMENT TO FOREST VILLAGES

Under the socio-economic policy of the Government, which is expressed also through the Department of Forests. employment was provided to the inhabitants of forest villages. The total employment offered to both casual and regular employees was 59,540 work days. Besides the labourers employed directly by the Forestry Department, an additional number of woodcutters was self-employed through and tenders or otherwise in felling transport raw-material from forests to the various forest industries, at a total of about 14,914 work days.

ACKNOWLEDGEMENT

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

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