

REPUBLIC OF CYPRUS

MINISTRY OF AGRICULTURE

AND

NATURAL RESOURCES

DEPARTMENT OF FORESTS

ANNUAL REPORT

OF THE

DEPARTMENT OF FORESTS

FOR THE YEAR

1991

BY
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ANNUAL REPORT OF THE FORESTRY DEPARTMENT
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1. 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.
- Application of forest engineering with a view to:
 - Maintain, improve and expand the forest roads, the forest telecommunications and forest buildings.
- 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.

2. EXPENDITURE

With a view to achieve the above targets £3.133.178 and £2.285.967 were approved in the Ordinary and Development Budgets respectively. The total amount spent out of both Budgets was £4.966.734 (i.e. about 91,7%).

In addition, through the Scheme of the United Nations High Commission for Refugees (U.N.H.C.R.) an amount of £233.396 was approved and spent for various development projects such as reforestation, silviculture, roads and fire traces, the purchase of vehicles/machinery as well as the organization of seminars.

3. REVENUE

Apart from the indirect benefits of the forests, which cannot be calculated in terms of money, an amount of £1.116.140 was collected by the Forestry Department as revenue in 1991. An additional amount of £25.082, out of which £25.062 represents forest products sold on credit and the rest (£20) 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 100 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; thirteen of them were functioning on a 24-hour basis and the other one only during day time.
- c) About 4,15 km of forest roads were constructed and 7,10 km were widened. In addition 34,36 km of vehicle tracks and 47,71 km of extraction roads were constructed, which serve also as fire traces.
- d) Two water tanks, one at Kambos Division and one at Troodos Division were constructed during the year under review.
Four 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 1991. 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 15 fire engines and 65 fire pumps of various types.

i) In spite of the measures taken in 1991, 14 forest fires broke out and burnt a forest area of 27 ha. It is worth mentioning that the year under review was the eighth 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 21 ha at Dhiosmis area, near Pareklisia village, started from private lands and due to favourable conditions expanded very rapidly.

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 Bacillus thurigiensis.

5. REFORESTATION

An area of 575 ha was reforested, while an area of 101 ha which was cultivated will be sown or planted in 1992. The total amount spent on reforestation was £241.132. Reforestation was not only carried out in Paphos, Troodos, Adelphi, Limassol and Macheras forests but also in other bare areas such as Orites, Asgata, Aspromoutti, Xylotympou, Sotira, Achna II, Ayii Saranta, Ayia Napa, Moutti tou Ziou, Stavrovouni, Athalassa and Kakoradjia A.

Thirteen bulldozers were employed almost continuously for ground preparation, three 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.

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 35 841 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 1 082 m³ R.O.B. of branchwood transported to C.F.I., is included. The revenue of the Department from timber sales was about £485.171. In addition timber valued at £25.062 was sold to the Cyprus Forest Industries Co. Ltd., on credit.

The Forestry Department issued 47 sawmill permits during 1991.

7. FOREST MANAGEMENT

a) A new forest Inventory of Adelphi, Macheras, Troodos and Paphos Main State Forests for estimation of *Pinus brutia* Growing Stock, Increment and Yield was initiated during 1991.

Macheras, Troodos and Adelphi forests were considered as one Management Unit and Paphos forest as another one. In the former unit were laid out 810 and in the latter 1 040 permanent sample plots out of which 210 and 340 plots respectively are new.

After the completion of the preliminary work, the enumeration of permanent sample plots was started and by the end of 1991 were completed 360 in Macheras, Troodos and Adelphi forests. It is estimated that by the end of 1992 the new Inventory will be completed.

b) The new Stand Management Rules for *Pinus brutia* and *Pinus nigra* forests which were prepared last year, were enforced early in 1991 after their approval by the Ministry of Agriculture and Natural Resources. The new rules are based on the conservation of the naturalness and the multiple use of these forests.

c) The Forestry Department received during the year under review another eight computers from the Data Processing Services. The Department has at its disposal sixteen computers as well as, a sufficient number of programs which are used very effectively.

d) During the year, 1 197 ha of forest land were leased for Agricultural and Animal husbandry purposes. By the end of the year three prospecting permits, sixty five quarry licences and four mining licences were in force in state forests; out of them one prospecting permit and six quarry licences were issued in 1991.

8. SILVICULTURE

During the year under review, among other silvicultural treatments, attention was given to the watering of plants (155 ha), especially in the plains. Most of the funds for silviculture were spent for this purpose. Additionally, an area of about 944 ha was treated silviculturally (thinnings, cleanings etc).

The total amount spent was £77.169.

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 both the Departmental needs and requests for export. A quantity of about 2 007 kg of seed was collected at a total cost of £9.927. A quantity of 22,00 kg was exported at a revenue of £774.

The production of seedlings in the Departmental nurseries was adequate. A number of 510 575 seedlings were raised compared to 541 842 in 1990. The seedlings produced in 1991 plus the stock of 1990 reached 901 185. Out of the total quantity, 181 809 were used Departmentally, 213 890 were sold to the public or other Government Departments, and 57 476 were issued free of charge to schools, village authorities and other organizations and institutions for planting on public or communal lands. Also, 29 494 plants were issued free of charge to private individuals for forestation of privately owned properties.

9. FORESTRY EDUCATION

The Cyprus Forestry College completed in 1991 its 40th Academic year. Seven Cypriot and four foreign students, obtained their Diploma. Two six-month Post-Diploma courses were also organised and six candidates from abroad obtained the Higher Diploma in Forestry. The 41st Academic year began on the 2nd October, 1991 with a complement of 29 students out of whom 18 were Cypriots and 11 from other countries.

During 1991 educational markings in Adelphi, Troodos and Paphos Forests based on the New Stand Management Rules for Pinus brutia and Pinus nigra were organised. Participation included professional and senior sub-professional staff of the Forestry Department as well as professors of the Forestry School of Salonica University.

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

10. FORESTRY RESEARCH

Forest Research and Publicity were continued on the same lines as in past years, against an expenditure of £5.924.

Research mainly dealt with forest genetics for production of good quality seed through the establishment of Seed Orchards, with the establishment and maintenance of a Tree Bank and an Arboretum and with the control of insects and fungi.

11. NATURE CONSERVATION

The Department of Forests during 1991 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 efforts for the study and protection of the Cyprus indigenous flora which was initiated in 1987 was continued. The collection of specimens for the completion of the Botanical Collection in the Department was also continued.
- c) The efforts to spot and protect Tree Monuments were intensified. A number of trees within the state forests were maintained at a cost of £1.200.
- d) The permanent sample plots which were established on the banks of the Akhna Water Reservoir in 1990, with the aim to study the impact of changed water conditions on the development of flora and vegetation were re-measured during the year under review.
- e) The effective protection of the Cyprus moufflon (Ovis ammon orientalis cyprius) continued and the animal remains on the increase.

12. FOREST RECREATION

An amount of £45.059 was spent for the creation, improvement and extension of picnic and camping places. In addition £73.580 were spent for the maintenance and cleaning of the picnic and camping places within the forests.

The works for the implementation of the Development and Management Plan for the Ayios Georgios area of Athalassa National Forest Park were continued and completed during the year under review. The Park was inaugurated by the President of the Republic on 31st July 1991.

In 1991 detailed plan was prepared and the works started for the implementation of the Development Plan for the entire Athalassa National Forest Park. The Plan was finalized through consultations with other interested Government Departments and Services, Local Authorities and other non Governmental Organizations. In the Plan it is provided the execution of various works of which the total cost is estimated £1.928.000.

The finalization of the Provisional Plan for the designated National Forest Park "Cavo Greco" was achieved through consultations with other interested Government Departments and Services, Local Authorities and other non Governmental Organizations. A detailed development plan was prepared and the implementation works had also started. It is expected that the whole Plan will be completed in 1992 at a total cost of about £117.000.

The Development Plan for the Cavo Greco covers an area of 450 ha and it is expected that will be declared into a National Forest Park in 1992.

The total amount spent for the establishment, development and maintenance of National Forest Parks during 1991 was £163.292.

Furthermore Provisional Development Plans were prepared for the Paedagogical Academy and Troodos National Forest Parks and submitted to the Ministry of Agriculture and Natural Resources for approval.

The Forestry Department established with funds from the Departmental Budget two new Nature Trails at Cavo Greco; one of a length of 1,70 km and the other of a length of 1,25 km at a total cost of £4.000. Furthermore the Yermasoyia Dam Nature Trail was completed with the construction of 1,05 km of a new path and the reconstruction of 2,75 km of existing path. The total cost £4.160 was defrayed by the Cyprus Tourism Organisation. The four Nature Trails at Troodos, the three at Akamas, the four at Cavo Greco, the two at Stavros tis Psokas, the one at Xyliatos Dam, the one at Madhari and the one at Yermasoyia Dam, attracted many walkers from both Cyprus and abroad.

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:

- 4,15 km of forest road at a cost of £ 16.290.
- 34,36 km of vehicle tracks at a cost of £27.786.
- 47,71 km of extraction roads at a cost of £119.347.

(A total of 14,46 km constructed by private contractors within felling coupes are included).

Furthermore 7,10 km of road widening was carried out at a total cost of £78.668.

In addition 1 347 km of roads, 662 km of vehicle tracks and 652 km of extraction roads, were maintained at a cost of £ 82.168.

The total mileage of the forest road network by the end of 1991 was 1 351,55 km of forest roads, 696,53 km of vehicle tracks and 699,45 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 £35.663 was spent for its maintenance and an amount of £16.095 was spent for its extension and improvement. This telecommunication system at the end of 1991 included the following:-

- 409,88 km of telephone lines
- 425 telephone instruments
- 9 telephone switch-boards
- 18 V.H.F. radio links
- 4 V.H.F. control stations
- 263 mobile radio telephones
- 288 portable radiotelephones
- 4 radiotelephone repeaters.

c) Forest Buildings

During the year under review, a new house was built at Ayia Marina Xyliatou Forest Station (Adelphi Division) as well as a new Fire Look-out Station was erected at Piana (Stavros Division) against a total expenditure of £24.692.

Usual repairs and maintenance were carried out to various forest buildings, at a cost of £27.895. Equipment for various forest stations was purchased at a cost of £4.480.

d) Machinery and Plant

During 1991 minor machinery and equipment of a value of £19.825 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 £219.417 was spent.

The Forestry Department received during the year six new fire brigade lorries, two vehicles and one lorry. In addition one lorry was replaced with a new one.

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 65 520 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 11 849 work days.

15. AID FROM ABROAD

During 1991, through the Scheme of the United Nations High Commission for Refugees (U.N.H.C.R.) an amount of £233.396 was approved for various development projects such as reforestation, silviculture, roads and fire traces/fire prevention, the purchase of vehicles/machinery as well as the organization of seminars.

The work done, which is also included in the respective subjects, was the following:

— Reforestation

An area of 81 ha was reforested, while an area of 3 ha was beated-up against a total expenditure of £39.560.

— Silviculture

An area of about 487 ha was treated silviculturally at a cost of £49.476.

— Roads

About 1,3 km of forest roads were constructed and 389 km were maintained at a total cost of £28.583.

— Fire Traces/Fire Prevention

About 31 km of fire traces were constructed and 115 km were maintained. Also an area of 350 ha was sprayed with simazine for fire prevention purposes against a total expenditure of £26.058.

— Vehicles/Machinery and Other Equipment

Four fire brigade lorries, two vehicles, one lorry, twenty mobile and fifteen radio telephones as well as four telefax and eight telephone repeaters were purchased at a total cost of £86.044.

— Seminars

For the organisation of seminars as well as for educational programmes an amount of £3.675 was spent.

16. 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 and to all other Organisations and individuals for their kind assistance to the Department of Forests. Warm thanks are also expressed to the United Nations High Commission for Refugees for its considerable assistance in financing various development projects such as reforestation, silviculture, roads and fire traces, the purchase of vehicles/machinery as well as the organization of seminars. 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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