

General.

Progress in forest 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; production of timber, other forest products, seeds and seedlings; tending of forest crops; management of forests; forest education; forest research; application of Forest Engineering with a view to (a) maintain, improve and expand the forest roads, forest telecommunications and forest buildings and (b) secure new machinery and equipment and maintain the existing ones; conservation of nature in forest areas, establishment, expansion and maintenance of picnic sites; provision of employment to forest villagers.

Expenditure

With a view to achieve the above targets £1,428,565.000 mils and £1,186,663.000 mils were approved in the Ordinary and Development Budgets respectively. The total amount spent out of both Budgets was £2,448,737.000 mils.

Revenue

Apart from the indirect benefits of the forests, which cannot be calculated in terms of money, an amount of £827,619.000 mils was collected by the Forest Department as revenue in 1982. An additional amount of £126,962.000 mils representing forest products on credit is still to be collected.

Forest Protection

As emphasised in the Annual Reports of recent years, the protection of existing forest against fires, especially during the prolonged dry and hot summers, is the principal concern of the Forest Service. The following preventive and fighting measures were taken against forest fires during the year under review:

- (i) A Fire Fighting Task Force consisting of 58 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.

- (ii) During the summer months 10 Fire Look-Out Stations, found on various high peaks in the Forest were manned on a 24-hour basis, in order to detect and report forest fires.
- (iii) About 69 kms of forest roads were constructed and 2.47 kms were widened. In addition 2.88 kms of vehicle tracks and 42.84 kms of extraction roads were constructed, which serve also as fire traces.
- (iv) Two water tanks of 20,000 gallons each, one at Panayia-bridge (Adelphi-forest) and one at Platania (Papho-forest), were constructed during the year under review. Four hydrants, one at locality Viklin and one at Panayia-bridge (Adelphi-forest), one at Platania (Paphos-forest) and one at Petra ton Nefron (College-forest) have been 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.
- (v) Daily mobile patrols in the forest, but especially along the delimitation line, warning and advising villagers and others not to start a fire, were carried out through-out the summer months.
- (vi) 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.
- (vii) The mechanisation which was initiated in 1978 with the acquisition of fire vehicles and fire pumps for the extinction of Forest fires, proved very successful, efficient and encouraging. At present the Department has at its disposal for fire fighting 6 fire engine lorries and 43 fire pumps.

(viii) Foam was used on a trial basis for the second time against forest fires. The results were very encouraging and similar trials are therefore planned next year. New machinery have also been purchased.

In spite of the measures taken in 1982, 32 forest fires broke out and burnt a forest area of 30 hectares (224 dons) half of which was bearing no forest trees. It's worth mentioning that the year under review was the 4th 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 7.5 hectares (56 dons), started from the area occupied by Turkey.

Usual protection measures were taken against illicit grazing and other offences which were rather limited.

An aeroplane was used for a third time for trial spraying against the Prosessory caterpillar attacking pine, using Baccillus thurigiensis, along tourist roads and popular forest areas. The results were very encouraging, mortality being practically 100%. As with such biological control of the pest no environmental pollution is caused, similar spraying by air are planned for the future.

Reforestation

The reforestation of the burnt areas of Papho-forest due to the Turkish invasion in 1974, continued at a high speed and were completed during the year under review. Extensive reforestation was not only carried out in the burnt areas of Papho-forest where most of the year's reforestation budget was spent, but also in other bare areas such as Adelphi, Troodos, Limassol, Stavrovouni, Machera, Sotira (near Ay. Napa), Ayios Nikandros, Athalassa, Misiscopos, Rousamoutti, Paliomandra, Lefkarides, Tafi Oiedon and Kofinarka. The area reforested was 6,619 donums (885 ha) whereas an area of 2,180 donums (292 ha) which was cultivated will be completed by sowing or planting in 1983. The total amount spent

on reforestation was £345,000.000 mils and it was less than that of the previous year by £4,615.000 mils.

Eighteen tractors were employed almost continuously for ground preparation, three of which were special ones (Menzi Muck) suitable for climbing and working on steep slopes. A big number of labourers were also employed for planting, sowing and construction of small hand made gradoni. Small catastrips were also constructed with the above mentioned special tractors; these small catastrips as well as the hand made gradoni were done where the use of bulldozers was impossible or not indicated.

Forest Expansion

During 1982, the work of the Expansion Division was fruitfully continued. Thus an area of 627.37 hectares (4,690 donums) found at Kornos, Kofinou, Kato Lefkara, Pera Chorion, Alambra, Ay. Varvara and Kato Koutrafas was declared as Main State Forest. At the same time the procedure of bringing under forestry more lands covering an approximate area of 976 ha (7,297 donums) especially in the vicinity of Goshi, Shia, Mosphiloti, Aradippou, Tersefanou, Pyrgos, Lymbia, Alambra, Mari, Dhali, Psevdas, Louroudjina, Oroklini, Pyla, Petrofani and Kornos is nearing completion. These areas are derelict and dry and will be afforested as soon as possible, for purposes inter alia of recreation and amenity.

Timber Production and Disposal

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

57,208 m³ R.O.B. of green timber were 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 5,014 m³ R.O.B. of branchwood, delivered to C.F.I. for particle board is included in the above figure. The revenue of the

Department from timber sales was about £656,024.= In addition timber valued at £126,962.= was sold to the Cyprus Forest Industries Co. Ltd., on credit.

During 1982 the operation of Platania Sawmill continued and 16 m³ of sawn timber were produced. All timber was used Departmentally for the construction and maintenance of Forest buildings.

The Department issued 55 sawmill permits during 1982.

During the same year the value of imported timber and timber products amounted to £28,353,915.= as against £28,814,876.= in 1981 i.e. a decrease of 1.6% was observed.

Silviculture

During the year under review, among other silvicultural treatments, attention was given to the watering of plants especially in the plains and most of the funds were spent for this purpose. An area of about 952 hectares (7,116 donums) was treated silviculturally at a cost of £43,500.=

Seed production and collection was satisfactory and much better than the previous year; it was adequate with available stocks in meeting the increased Departmental needs and requests for export. A quantity of about 7,332.50 kgs of seed was collected at a total cost of £14,920.= A quantity of 37.37 kgs was exported at a revenue of £701.940 mils.

The production of seedlings in the Departmental nurseries was adequate. 357,426 seedlings were raised compared to 683,507 in 1981, the seedlings produced in 1982 plus the stock of previous years' production reached 994,587. Out of this number 169,692 were used Departmentally, 257,846 were sold to the public or other Government Departments and 47,508 were given free of charge to schools, village authorities and other organizations and institutions for planting on public or communal lands.

Forest Management

The new Inventory of Macheras, Adelphi, Troodos and Paphos Main State Forests for estimation of Pinus brutia Growing Stock, Increment and Yield which was initiated in Autumn 1981, constitutes a significant project that was successfully completed in the year under review.

Macheras, Troodos and Adelphi forests were considered as one Management unit and Paphos forest as another one. In the former unit 600 and in the latter 700 circular sample plots of a size of 0.2 ha each were laid out. All field work was completed by the end of 1982 and subsequently the collected data were studied and analysed with the help of a computer. The main conclusions drawn are the following:

1. Estimated Growing Stock: 3,130,000 m³ R.O.B.
2. Out of the above Growing Stock 1,876,000 m³ R.O.B. represent silviculturally mature trees and 1,254,000 represent trees which are not ready for felling. Branchwood is not included in the above figures.
3. The Annual Yield for the next ten years has been estimated at 57,000 m³ R.O.B.
4. Where natural regeneration is inadequate it should be supplemented by artificial reforestation with the object of substantially increasing the Growing Stock.

During 1982, 1,476 hectares (11,034 dons) of forest land were leased for Agricultural and Animal husbandry purposes. Prospecting permits, quarry licences and mining licences were as usual issued or renewed in State Forests.

Forest Education

The Cyprus Forestry College completed in 1982 its 31st Academic year. Twelve Cypriot students, one from Sudan and one from Zimbabwe obtained their diploma. The 32nd Academic year began on the 2nd October, 1982 with a complement of 39 students out of whom 32 were Cypriots and 7 from other countries.

An educational tour to Yugoslavia was organized in June. Both the Senior and Junior Courses participated in the tour as well as the members of the instructional staff of the College. In September a group of seventeen foresters from Yugoslavia who were on a study tour to Cyprus spent 10 days at the College, returning in a way the visit of the Cyprus Forestry College to Yugoslavia.

Thirteen M.Sc. students with two University lecturers from the University of Edinburgh, Department of Resource Management, visited the Cyprus forests and other natural resources of Cyprus from the 20th April to the 3rd May, 1982. Accommodation and other facilities were offered to them for part of the above period at the College and elsewhere.

Other officers participated at various international Conferences, Seminars etc.

Forest Research

Forest Research and Publicity were continued on the same lines as in past years and intensified, against an expenditure of £3,989.=.

Analytically Research dealt with problems of enriching the Cyprus flora through introduction and trial of exotics, forest genetics for production of good quality seed through the establishment of Seed Orchards, Tree Banks and Arboreta and forest protection against insects and fungi.

Forest Engineering

(i) Forest Roads

The construction of new forest roads and 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 by the Forest Department:

- (a) 0.69 kms of forest road at a cost of £4,990.=
- (b) 2.88 kms of Vehicle tracks at a cost of £8,465.=
- (c) 42.84 kms of extraction roads at a cost of £98,541.=
- (d) 1.60 kms of road widening at a cost of £4,990.=
- (e) Completion of a bridge at Mylos-Karterouni forest road and restoration of a nearby destroyed irrigation system at a cost of £1,430.=
- (f) Construction of a pipe culvert Moniatis - Mesapotamos at a cost of £311.=

In addition the Department undertook the following work on behalf of the Cyprus Telecommunication Authority:

- (a) Construction of twenty culverts along Machera-Kionia forest road at a cost of £5,220.=
- (b) Widening of 0.87 kms of the same road from 14 to 24 ft. at a cost of £31,796.= on behalf of CYTA.

The Forest Department constructed an Agricultural road of a length of 0.86 km from Sentouka to Platys locality, serving mainly Tris Elies village, against a cost of £1,000.=; the project was done on behalf of the District Officer who also financed it.

In addition 1,327 kms of roads, 600 kms of vehicle tracks and 415 kms of extraction roads, were maintained at a cost of £38,885.=

The total mileage of forest roads by the end of 1982 was 1,387.84 kms of forest roads, 603.44 kms of vehicle tracks and 457.95 kms of extraction roads.

(ii) Forest Telecommunications

The Forest Department maintains a well-organised telecommunication network for proper forest protection and management. An amount of £21,375.= was spent for its maintenance and an

amount of £18.= was spent for its extension and improvement. The telecommunication system in the free part of Cyprus by the end of 1982 consisted of the following:

- (a) 406 kms of telephone lines
- (b) 378 telephone instruments
- (c) 9 telephone switch-boards
- (d) 6 V.H.F. radio links (12 sets)
- (e) 4 V.H.F. control stations
- (f) 135 mobile radio telephones
- (g) 116 portable radiotelephones
- (h) 7 loud speakers (fixed on vehicles)
- (i) 7 loud hailers (portable)
- (j) 1 radiotelephone repeater

(iii) Forest Buildings

During the year under review Kolladjia Fire Look out Station was completed at a cost of £500. Usual repairs were carried out to various forest stations at a cost of £9,892.= Major repairs were carried out to Stavros forest office, Stavros Rest-house, the P.F.C.'s house and Platania canteen at a cost of £1,048.= Equipment for various Forest Stations was purchased at a cost of £2,250.=

(iv) Machinery and Plant

During 1982 minor machinery and equipment of^a value of £2,667.= was purchased. For the running and Maintenance of all Machinery and Vehicles (including fuel and lubricants but excluding the wages of drivers) an amount of £261,329.= was spent.

Nature Conservation and Forest Recreation

The Department of Forest during 1982 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. The effective protection of the Cyprus moufflon (ovis ammon Cyprius) continued and the animal is now on the increase. Three Cyprus moufflon were transferred to Platania Forest Station from Stavros and are kept in captivity next to the area fenced in for the fallow deer.
- (b) An amount of £6,826.= was spent for improvement and/or extension of the picnic places at Xerargaka, Platania, Dasoudhi, Kionia and Profitis Elias. In addition to this amount £7,956.= was spent for the maintenance of Mandra tou Kambiou, Stavros tis Psokas, Ayia, Trooditissa, Cedar Valley, Kambin tou Kaloyirou, Marathos, Platania, Pashia Livadhi, Mesapotamos, Kornos and Xerokolymbos picnic places. The Forest Department established a Nature Trail at Troodos from Melis coffee-shop to Makrya Koutaria locality. The trail has a length of 2.4 kms and will be completed in 1983. The cost which was £3,500.= was defrayed by the Cyprus Tourist Organisation.
- (c) Ayia Napa Improvement Board gave an additional amount of £29,159.= to the Forest Department for completion of a camping site which was started in 1981 in the Communal Forest of that village which is found near the seashore. The whole work was undertaken by the Forest Department and was completed during the year under review.

Provision of employment to the inhabitants of forest villages

With 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 528,320 working hours against an expenditure of £679,536.=.

Besides the labourers employed directly by the Forest Department, an additional number of woodcutters was also self-employed through tenders or otherwise in felling and transport of raw-material from the forests to various forest industries.

Acknowledgment

Warm thanks are expressed to the Ministry of Agriculture and Natural Resources for its significant and effective help in the execution of the work of the Department. Thanks are also due 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 Telecommunication Authority, the BoyScouts, the Girl Guides, The Cyprus Forestry Association 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 Forest Staff, senior and junior, 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 would have been achieved.

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