1. General economic trends affecting the forest and forest industries sector

The economy of Cyprus exhibits a positive growth rate for 2011 and 2010 after the slump in 2009. Specifically, the growth rate increased by 0.5% for 2011 (provisional data) and 1.1% for 2010, compared to the decrease of -1.9% in 2009.

The main stimulus to growth in 2011 is the expansion in the activities of Accommodation and Food Service, Information and Communication, Financial and Insurance Activities, Real Estate Activities and Professional, Scientific and Technical Activities.

The primary sector exhibits a positive growth rate for second consecutive year, 2.9% in 2011 and 1.4% in 2010, after exhibiting negative growth rates for five consecutive years. On the other hand, the secondary sector registers a negative growth rate for third consecutive year. Specifically, a negative growth rate is exhibited in 2011 of -6.6% compared to -4.1% in 2010 and -11.6% in 2009. Finally, the tertiary sector of the economy exhibits a positive growth rate in real terms 2.1% in 2011, compared to 2.4% in 2010 and 0.9% in 2009.

The sector of Agriculture, Forestry and Fishing is exhibiting a positive growth rate 2.9% in real terms for 2011 and 1.4% in 2010, compared to the negative growth rates that appeared for five consecutive years.

The main economic indicators for years 2009, 2010 and 2011 are presented in Table A.

The Forestry sector in Cyprus has almost not been affected by the economic crisis, either directly or indirectly. The reason lies on the fact that the level of investment in Cyprus Forestry is very low in relation to the investments in other sectors and branches of the productive activities in Cyprus. The contribution of forestry to the Gross Domestic Production is far below 1%. This value refers to State forestry only. Private forestry in Cyprus is almost not existed. Almost no management is carried out in private forests and therefore, the level of investment is very low.

Even though the significance of forestry as a driver of the economic growth is negligible, the environmental and social outputs from the Cyprus forests are highly valued by the public. However, many of these environmental and social outputs do not have a place in market and therefore the forest owner does not have any direct economic benefit for providing them.

In Cyprus, very few people depend exclusively on forestry. This is merely due to the low productivity of forests and the dependence of the market on the imports of finished or processed wood products. Additionally, rural depopulation has been alienating people from the forests, pushing them to urban centers where the service sector is growing.

Conversely, urbanization induces increasing demand for recreational services and option values rather than for timber products. An economic valuation study shows that the overall social and environmental value of forests exceeds by far the commercial use value of trees as wood material.
Cyprus forests provide important indirect benefits and services such as protection of soil and water resources, conservation of biological diversity, support to agricultural productivity, picnicking, camping, hiking, walking, cycling, skiing, bird-watching, sightseeing, hunting, fishing, carbon sequestration and mitigation of global warming, combating desertification, mushrooms, medicinal and aromatic plants, cones, acorns, resin etc.

The importance of ecotourism is more and more increasing as individuals come closer to nature for outdoor experiences. Several ecotourism enterprises were founded especially in communities around the forests. The importance of these enterprises is significant to rural people as a source of employment and income. The number of visitors with special interest on the flora and fauna of the island has an increasing trend.

Timber-based industries are gradually shrinking since the wood market is heavily depended on imported final products.

2. **Energy and the forest sector**

In Cyprus, there are no indigenous sources of energy apart from some renewable potential. Therefore, the energy system is mostly dependent on imported fuels.

Up to now, the contribution of Renewable Energy Sources (RES) in the energy supply of the country was very low and it was mainly based on the use of solar energy for water heating. The contribution of RES in the electricity sector was also negligible.

The development of renewable energy sources in Cyprus is on a very good track. Currently 3 Aeolian parks are under operation with total power of 133,5 MW. 846 small photovoltaic systems and 11 biomass/biogas units were established with a total power of 9,32 MW and 7,96 MW respectively.

Projects like these will help Cyprus in meeting the 2020 targets regarding production of energy from renewable sources.

The exploitation of biomass from Cyprus forests is uneconomical mainly because of the low productivity, the steep slopes and the irregular terrain, the relatively low density of road network and the long distances between the place of production and the place of processing.

The most important factor limiting the production of biomass and negatively affecting the costs of its production are the adverse soil and climatic conditions that exist in Cyprus. It deserves to point out that from a study carried out in natural pine stands, it was found out that the average time needed for trees to reach the breast height ranges between 12 and 35 years depending on the site quality.

Therefore, the biomass production in the Cyprus forests cannot support any serious investment. According to their productive potentials, Cyprus forests can only occasionally support any biomass processing industry.
The use of industrial and municipal wastes can support only periodically small scale biomass processing industries.

3. **Climate change and forest products markets**

Climate change and forests are quite linked; On the one hand, climate change can stress forests affecting forest production and health and on the other hand forests act as a sink of carbon dioxide, playing a major role in mitigating climate change.

Climatic changes stresses Cyprus forests through higher mean annual temperatures, lower precipitation and unusual distribution, extreme weather events leading to desertification, higher forest fire risks etc. A short term plan for the mitigation of drought was prepared. Also a decision was taken for the preparation of an action plan for the adaptation of forests to climatic change.

The Department of Forests, having the essential know-how, has been focused on three measures to reduce the consequences of drought on forests. These are related to forest fire prevention and suppression, the expansion of forests through afforestation and the reforestation of degraded, burned forest areas and the effective control of grazing on forest land in order to prevent forest degradation.

The forests (living biomass) in Cyprus are estimated to contain nearly 2,784 million tons of carbon. This amount has increased during the last decade, since the annual increment for the same period exceeded the harvesting drain. Thus, more carbon is sequestered in forest than what is released in harvesting. The forests of Cyprus are capable of blocking approximately 37 thousand tons of carbon as estimated by the gross increment of the forest. This amount makes up the 0.47 % of the total 2009 emissions of carbon in Cyprus.

4. **Research and development policies**

Scientific research and knowledge have been the backbone of most policy related decisions and actions taken by the Department of Forests. For instance, the development of the National Forest Program and the formulation of the Forest Policy were based on such knowledge. Similarly, the adoption of forestry measures in the Rural Development Plan 2004 - 2006 and Rural Development Programme 2007 – 2013 and the procedure for the formulation of the Cyprus Criteria and Indicators for SFM have also taken into consideration the scientific research and knowledge.

During the last years, there has been a noticeable improvement on the quality, the quantity and the accuracy of information collected by the Department of Forests concerning the state and the development of national forest resources. Collecting mechanisms have been redesigned to comply with modern trends, needs and technologies i.e. GPS, GIS, remote sensing etc.

A considerable number of applied research programs dealing with the management and exploitation of forests resources is elaborated in Cyprus.
The capacity of research institutions in Cyprus has been strengthened, especially during the last years, through various projects and co-operation on national and regional level. Funding is ensured either through the national budget or other international sources. The accession to European Union created a better environment for improving financing of research activities and institutions in Cyprus.

The National Forest Programme

The current National Forest Programme (nfp) aims at safeguarding forest resources for the benefit of the whole community while capturing the advantages of development on ecotourism, concentrates on the following courses of action:
- action to protect and enhance forest cover, water supplies, wildlife and the national heritage in State forests,
- afforestation and the restoration of degraded land in the wider countryside,
- safeguarding particular places such as national parks, nature reserves etc, which have outstanding scenery, cultural importance, exceptional ecological or scientific interest,
- encouraging, guiding and controlling recreation and tourism development,
- providing information and publicity about the forests and the flora and fauna they contain.

The decision for the formulation of a new National Forest Programme covering the decade 2011-2020 has also been taken. The new National Forest Programme will lead and steer the forest policy development and planning.

Forest Policy

During 2011, the preliminary draft of a new Forest Policy was formulated. A public consultation was conducted in order to finalize the preliminary draft, which will be sent to the Council of Ministers for adoption.

Forest Legislation

The Forest Legislation which covers the Forest Law and the Forest Regulations has been amended from time to time since its first enactment (1879). A new attempt to revise the Forest Legislation has been initiated under a Technical Co-operation Programme of FAO. The revision of the Forest Legislation was considered a must for the effective implementation of nfp and to be consistent with the legal framework and requirements of the EU and international forest dialogue.

In 2011, the drafts of a new Forest Legislation and Regulations were finalized. During 2012, these drafts are expected to be voted by the House of Representatives.
5. **Development in forest products market sectors**

Cyprus is a net wood importing country. The overall wood market imports accounts up to 98%, while exports are negligible.

The main commercial value species of Cyprus forests is Pinus brutia, which constitutes about 60% of the State forests and 90% of the growing stock. Although Pinus brutia can reach large sizes and produce good quality timber, the growth rate is low accounting only to about 1 m³ per ha per year. In addition, some areas are critically understocked, and regeneration is inadequate. Consequently, large areas are excluded from felling to allow for the growing stock to recover and obtain the desired stocking.

The yield is mainly obtained from the productive state forests and it is sold to sawmill owners or wood-cutter associations through open tenders.

The local production can only satisfy a small portion of the local demand for wood, thus timber-based industries are supported on imported timber, which accounts for 98% of their timber needs. The local yield is supplementary to some private sawmills that produce tailor made products for constructional purposes mainly for renovation of traditional buildings, box-shooks and pallets for the export trade.

**Marketing and Consumption of Forest Products**

During 2011, timber extraction from Cyprus forests and supply to local wood industries continued in a satisfactory way. A volume of 4459 m³ R.O.B. of timber was extracted from state forests and sold to private sawmills and other individuals for the production of box-shooks, pallets, tailor made products etc. In addition, a volume of 1719 m³ R.O.B. of timber was extracted from private forests.

In addition to the above, timber from state forests, equivalent to 3370 m³ R.O.B., was extracted and sold to private individuals as firewood. From the above volume, 82 m³ R.O.B. were extracted from burnt areas. In addition, a volume of 1042 m³ R.O.B. of firewood was extracted from private forests.

The local needs are satisfied by importing timber from abroad. The most important products imported are sawnwood and wood based panels. The 2011 level of sawnwood, wood based panels and paper and paperboard imports are presented in the table below:

<table>
<thead>
<tr>
<th></th>
<th>Total volume of imports for 2010 (thousand m³)</th>
<th>Total volume of imports for 2010 (thousand m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sawnwood</td>
<td>56,045</td>
<td>73,642</td>
</tr>
<tr>
<td>Wood based panels</td>
<td>90,852</td>
<td>108,695</td>
</tr>
<tr>
<td>Paper and paperboard</td>
<td>74,063</td>
<td>75,795</td>
</tr>
</tbody>
</table>

There are not any significant exports of any wood based products from Cyprus, except from recovered paper for recycling purposes.
All traded quantities of wood and wood-based products can be seen on the attached TC1 and TC2 tables.

**Forest Industries**

The timber-based industries of the island are gradually shrinking and there is a tendency of wood market shifting to imported final products.

A good example is the Cyprus Forest Industries Ltd (CFI), the main company that was operating in the wood industry sector. CFI was established in 1970. The main shareholder is the government with 51% of the capital share. CFI used to have a timber-processing unit, which has been closed down due to limited raw material availability. CFI’s major activity nowadays is the dressing of imported particle-boards and medium density fibreboards (MDF) with veneer sheets and the production of plywood using imported wood. Nowadays, CFI is mainly directed to the trade of imported timber products.

In 2011, fifteen small bandmills producing pallets and box-shooks and one larger mill producing, in addition, constructional timber were in operation. No changes occurred compared to 2010.

5. Tables

**Table A: Economic indicators**

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011 Provisional</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gross Domestic Product (GDP)</td>
<td>3,6%</td>
<td>-1,9%</td>
<td>1,1%</td>
<td>0,5%</td>
</tr>
<tr>
<td>2. Registered Unemployment</td>
<td>2,9%</td>
<td>4,3%</td>
<td>5,5%</td>
<td>6,7%</td>
</tr>
<tr>
<td>3. Inflation Rate</td>
<td>4,67%</td>
<td>0,33%</td>
<td>2,43%</td>
<td>3,29%</td>
</tr>
<tr>
<td>4. General Government Deficit % of GDP</td>
<td>0,9%</td>
<td>-6,1%</td>
<td>-5,3%</td>
<td>-6,3%</td>
</tr>
<tr>
<td>5. General Government Debt % of GDP</td>
<td>48,3%</td>
<td>58,0%</td>
<td>60,8%</td>
<td>71,6%</td>
</tr>
</tbody>
</table>

Source: Cyprus Central Bank

**Table B: TC1 and TC2 Tables**

See attachment