

20 March, 2008

Economic Accounts for Forestry  
**2006**

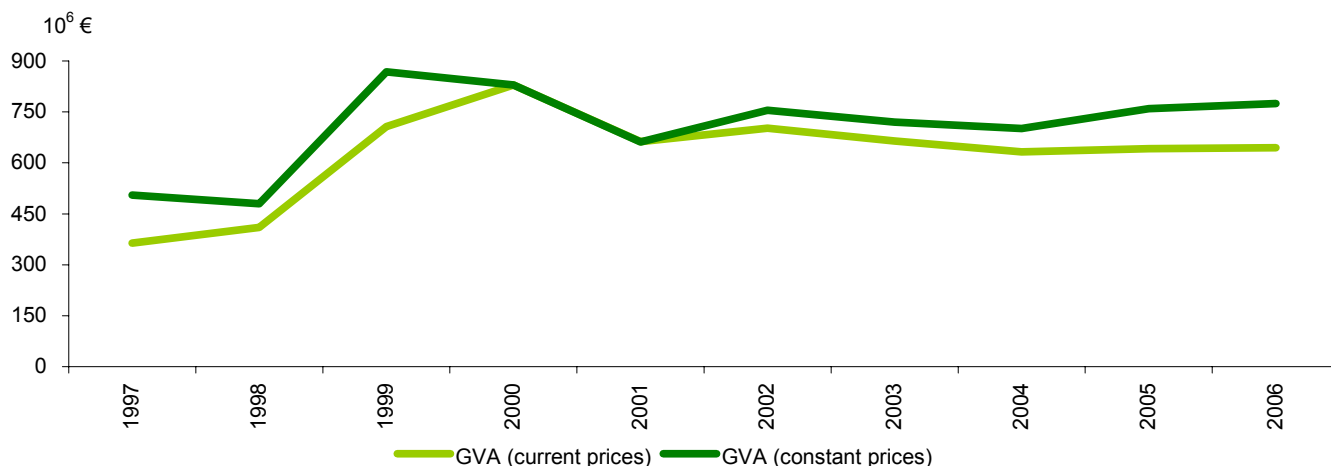
**GROSS VALUE ADDED FOR FORESTRY REMAINED STABLE IN 2006**

In 2006, the Gross Value Added (GVA) for Forestry remained stable in nominal terms (+0.4%) and its volume increased slightly (+2%) in comparison with 2005.

In the World Forestry Day, INE publishes the Economic Accounts for Forestry (EAF) for 2006 and a brief analysis on the last 10 years of forestry activity in Portugal. Apart from the environmental key role, forest generates economic value through the chain of related activities: Forestry Activities, Forestry Exploration and Manufacturing Industry of paper, wood and cork.

In 2006, Gross Value Added (GVA) of Forest remained stable in nominal terms (+0.4%) and increased 2% in volume, in comparison with 2005. When compared with 2000 (year of the highest value), GVA presented a strong decrease, of around 22%. In fact, since 2000, prices have fallen continuously.

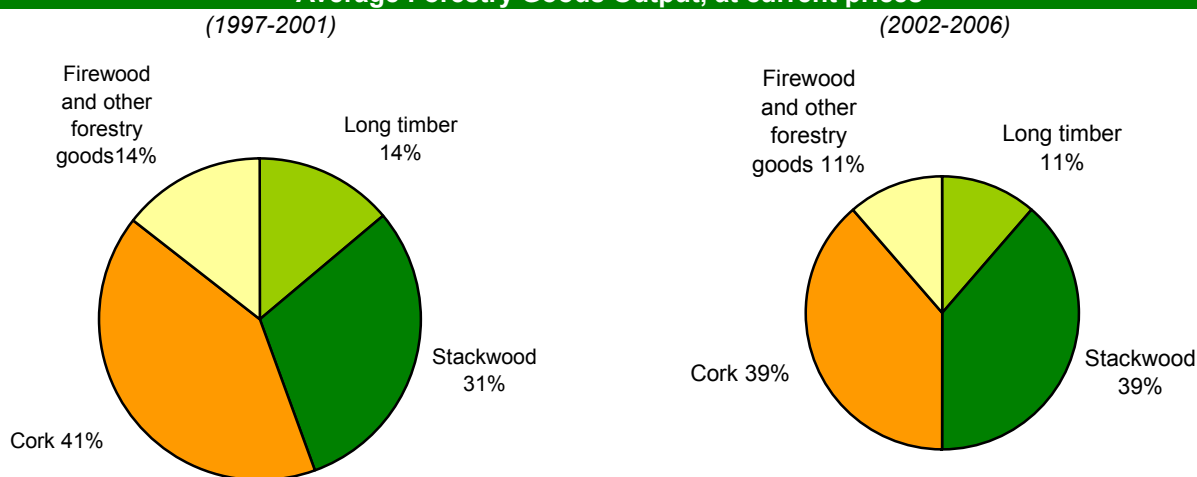
**Forestry Gross Value Added at Basic Prices**



In Base 2000 Production includes not only the Forestry activities and Forestry Exploration (hack of trees, removal of wood and cork), but also the Net Growth of the Forest (balance between the enlargement of wood or cork in trees and the reduction of plantations by cutting, disease or fire).

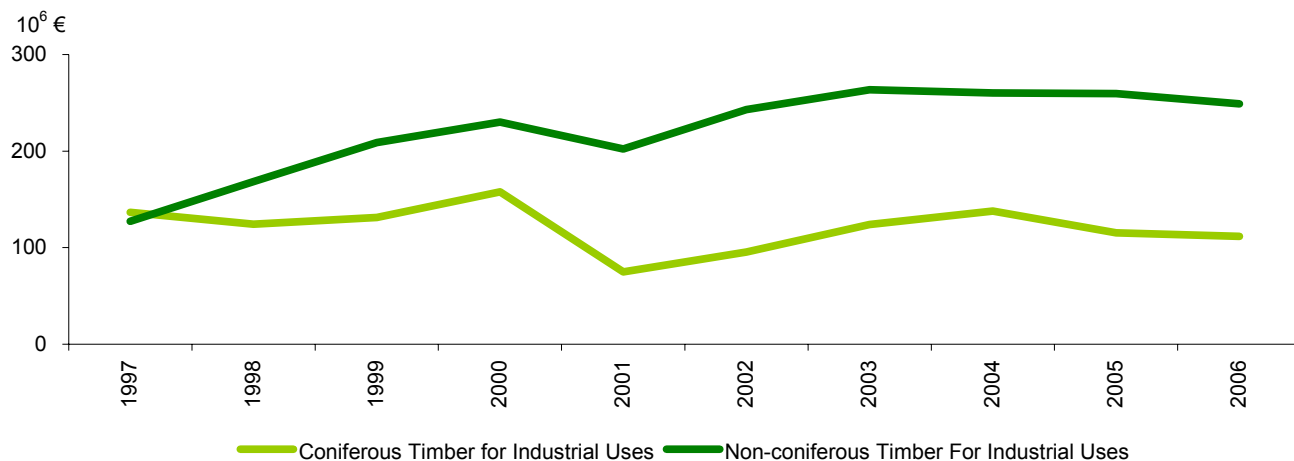
Products that are more relevant in the structure of forestry goods output are Cork and Wood (mainly stackwood). Comparing the two five-year groups, 1997-2001 and 2002-2006, there was an important increase (+8 pp.) in the relative importance of Stackwood (raw material of the industries of panels and paper), while Cork decreased slightly (from 41% to 39%) and Long Timber (raw material for furniture industry) decreased 3pp. The structure of production for 2006 is not very different from the average for the period 2002-2006, as Stackwood and Cork presented relative positions of 39% and 38%, respectively.

**Average Forestry Goods Output, at current prices**



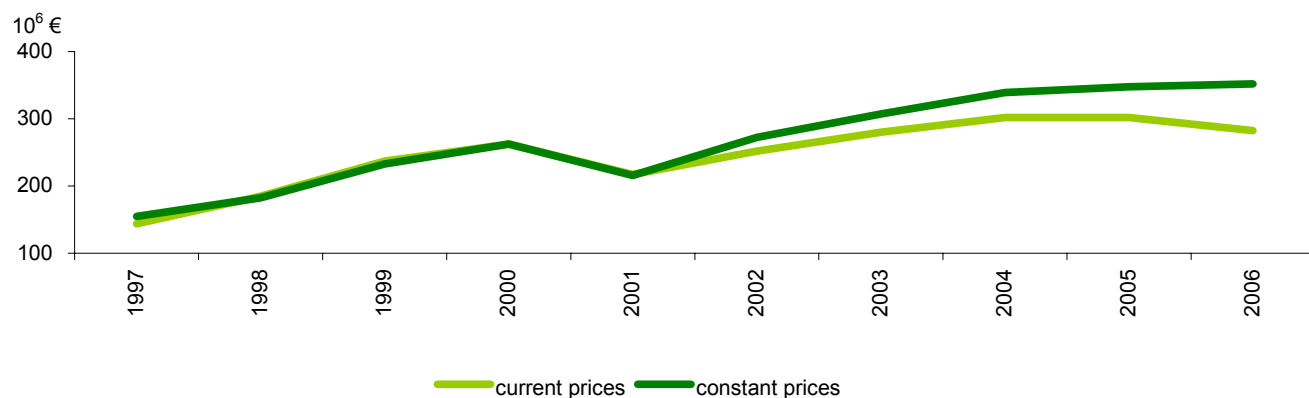
Looking at the evolution of Wood production in terms of species, it is possible to conclude that, in the last 10 years, Non-coniferous wood recorded a trend of growth contrasting with Coniferous wood. The first group consists mostly of eucalyptus, the main raw material of the pulp paper industry, and this growth reflects the greater importance of Stackwood. The maritime pine is the most important specie of Coniferous, considering its use for industrial purposes. Although this type of wood is also used in the pulp paper industry, it's mainly used in the furniture industry. The decline in the nominal production reflects the lower dynamism observed in Long timber, in comparison with Stackwood.

### Timber Output (current prices)

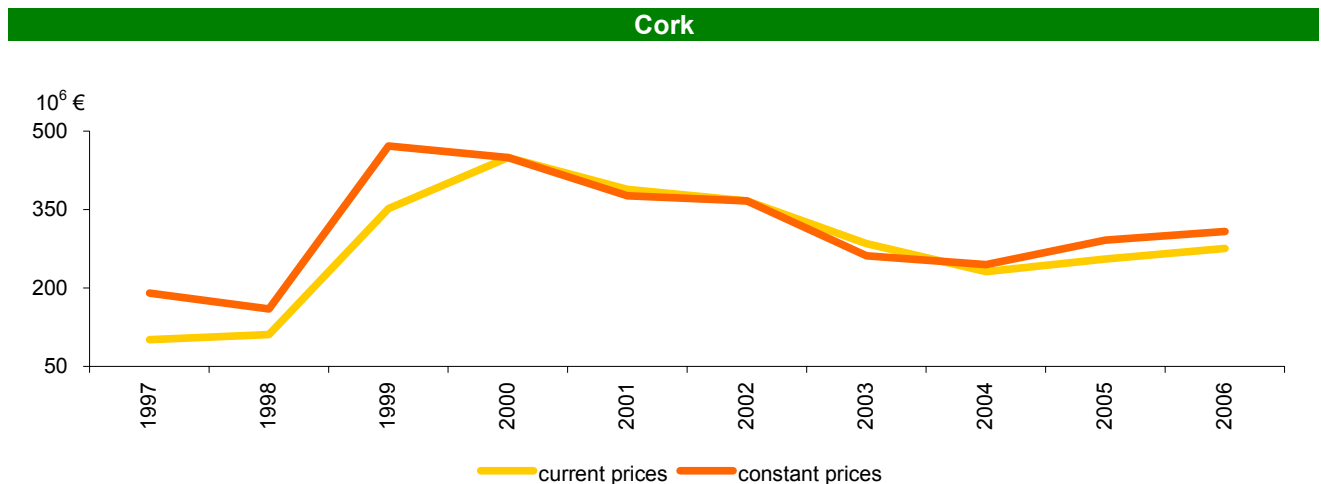


In 2006, the decrease in Stackwood production, at current prices (-6%), was due to lower producer prices, taking into account that volume grew 1%. The output of Stackwood recorded a growing trend in volume and value, in the series under analysis. Considering that 2003 and 2004 were years of large fires, it should be emphasized that the sale of Stackwood increased significantly, despite the decrease in prices. The year 2001 was characterized by a decline of 17% in the value of the output of Stackwood due to the fall in producer prices, which did not stimulate the sale to factories.

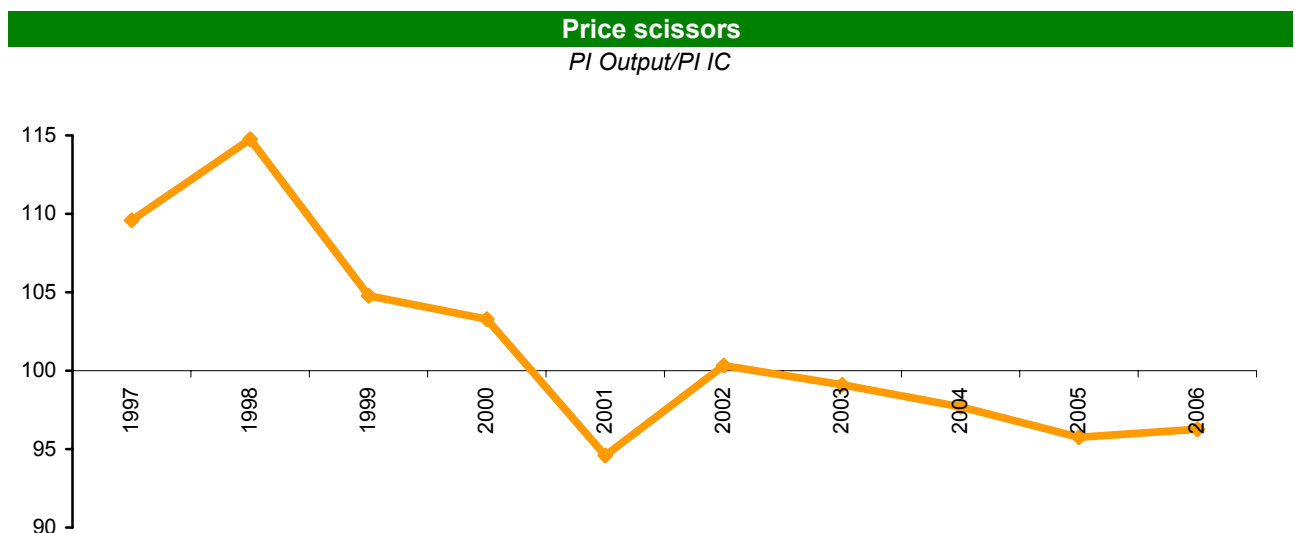
### Long Timber Output



After a period of continuous decline in the real and nominal output (2001-2004) due to the ageing and diseases of cork oaks, there was a big recovery of the output of Cork in 2005 and 2006. In 2005, producers chose to extract less Cork than available, as a result of its low prices. The year 2006 was a good year because there was a large amount of Cork in the trees that was sold at higher prices associated to its high quality. In the same year the volume increased nearly by 6% and prices 2% resulting in an increase in value (8%).



Analysing the evolution of Price Scissors (ratio between the implicit Output price index and the Intermediate Consumption price index), one can conclude that the market conditions have been unfavourable to producers since 2003. This disadvantageous relationship between output and current expenditure prices is explained, among other reasons, by the huge increase in the energy prices (mainly fuel).

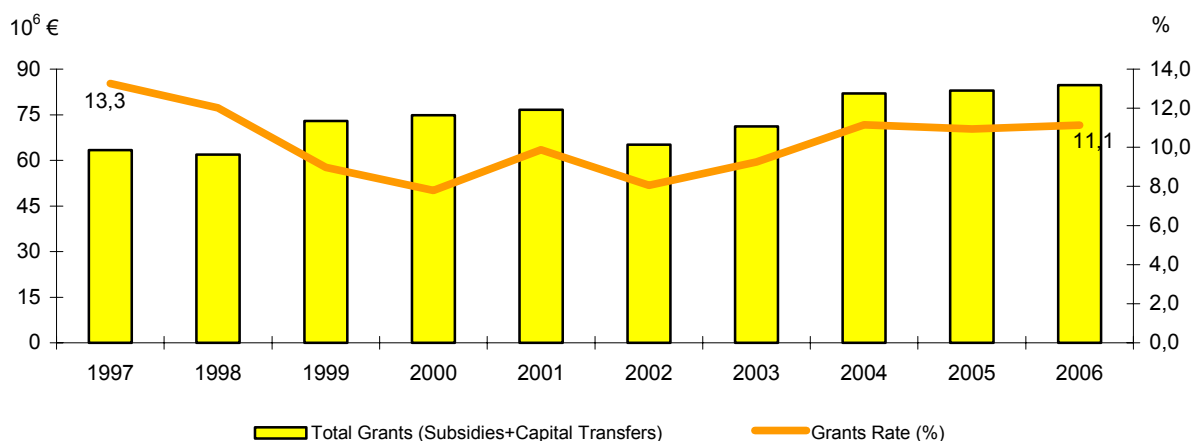


Monetary grants for forestry industry comprise "Subsidies on Products", "Other Subsidies on production" and "Capital Transfers". As "Subsidies on Products" are classified monetary grants to support the conversion of agriculture into forestry areas. "Other Subsidies on production" include the compensations on the income reduction due to the afforestation of agricultural land (these subsidies are not directly linked to the volume of production). "Capital Transfers" include investment grants intended to support the acquisition of fixed assets, and other capital transfers acting as forestry investment measures, such as maintenance of forests, protection against pollution and fires (particularly the control of shrub and construction of fire tracks).

The year 2006 is the one that registered the higher level of grants to Forestry industry, which have been increasing since 2002. However, the higher value of monetary grants rate (ratio between total grants and Forestry output, at current prices) has taken place in 1997 (13.3%).

### Grants Rate

(current prices)



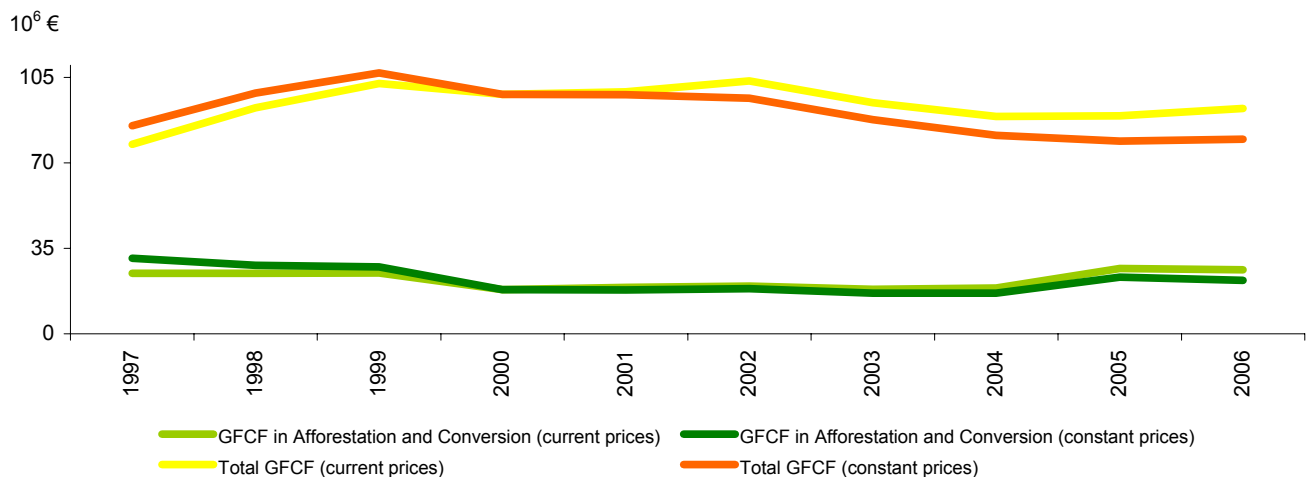
Subtracting to the GVA the Fixed Capital Consumption, the Compensation of employees, the Rents to be paid and the Interest paid and adding the Other Subsidies on Production and the Interest Received, the result is the Net Entrepreneurial Income. In spite of a notable trend of nominal growth in the decade under review, this economic aggregate remains almost unchangeable since 2004.

## Net Entrepreneurial Income (current prices)



In the year 2006, Gross Fixed Capital Formation (GFCF) increased in value (+3%) and volume (+1%). In 2005 there was a significant raise in volume (+39%) of GFCF in Afforestation and Conversion (plantation of eucalyptus and cork oak). This strong afforestation took place in the two years of major fires in Portugal, 2003 and 2004, which devastated about 10% of national forest. The year 2006 shows a decrease of GFCF in Afforestation and Conversion (around 6% in volume, in comparison with the previous year).

## Gross Fixed Capital Formation



### Methodological notes:

The Economic Accounts for Forestry (EAF) represent a systematic, harmonised and complete framework of the forestry activity, in order to allow the calculation of variables and economic indicators, in a coherent and harmonised system of accounts. The reference for the EAF is the "Handbook on the Economic Accounts for Agriculture and Forestry 97 (1.1)" Eurostat. Being a Satellite Account, the methodology is based on the on the System of National Accounts of the United Nations (SNA 93) and the European System of National and Regional Accounts 1995 (ESA95).

The compilation of these accounts involves the collection, analysis and processing of information from surveys, administrative data, information and estimates of experts, in order to compile macroeconomic aggregates and indicators. Without being exhaustive, the following table shows the main variables of EAF and the relations between them:

1	Timber for Industrial Uses Output
2	Other Products Output
3	Forestry Services Output
4	Forestry Output (1+2+3)
5	Intermediate Consumption
6	Gross Value Added at Basic Prices (4-5)
7	Fixed Capital Consumption
8	Net Value Added at Basic Prices (6-7)
9	Compensation of Employees
10	Other Taxes on Production
11	Other Subsidies on Production
12	Factor Income (8-10+11)
13	Operating Surplus / Mixed Income (12-9)
14	Rents to be Paid
15	Interest Paid
16	Interest Received
17	Net Entrepreneurial Income (13-14-15+16)