

PREVENTION OF EROSION BY THE FORESTS OF THE ESPOSENDE REGION



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EROSION

The gradual activity of external dynamic agents (air, wind, water, ice, living beings, etc) that change the terrestrial relief. Two main types of erosion can be distinguished: wind erosion and water erosion. When erosion occurs, it can also cause flooding in alluvial plains, and thus damage outside the site where it originates.

Main causes:

- Energy and amount of rainfall;
- Capacity of the soil to withstand erosion;
- Amount of soil covered and protected by vegetation;
- Versant characteristics;
- Soil management.



EROSION IN ESPOSENDE

Esposende is one of the Portuguese locals more affected by the devastating phenomenon of erosion. It is urgente to move forward with the Coastal Recovery Plan of Esposende (PRLE). In Esposende many of the main causes of soil erosion, both natural and anthropic, are notable. In winter, the rains (although for a relatively short period of time) have a great intensity, aggravating certain situations in areas where there is no vegetation. Mainly due to deforestation or fires (which are increasingly being verified), runoff waters have even more power in soil erosion. We can therefore conclude that our town is mainly affected by water erosion.

In Esposende, the main factors contributing to erosion are:

- Use and over-creation of agricultural fields;
- Fires;
- Flood.



PREVENTIVE MEASURES

- Do not remove plant covers from soils, mainly from mountainous regions;
- Plan any type of construction so that, at the moment or in the future, there is no earth displacement;
- Monitor changes occurring in the soil;
- Reforestation of devastated areas, especially in hillside regions;
- Effect of mulch of different plant species, which creates a protective layer on the soil.



Castro de São Lourenço



Protecting the forest is also protecting historic heritage.

Abies pinsapo



Cedrus atlantica



Pinus pinea



Cupressus lusitanica



Lanius senator



Sciurus vulgaris



Emberiza cirius



PREVENTION OF FOREST EROSION

Soil erosion is very common in places where there is often a low amount of vegetation. One of the most significant effects of vegetation when it comes to the prevention of erosion is the absorption of water by its roots that