

## DESIRE: Desertification mitigation and remediation of land - a global approach for local solutions

• **WB4:** Implementation and monitoring phase | **Partner 7:** University of Aveiro



In collaboration with: Escola Superior Agrária de Coimbra  
University of Wales Swansea

### Technology: Preventive Forestry

#### Definition:

Preventive Forestry is composed by a set of measures applied to forest stands, shrubs and other spontaneous species to protect forest against fires. These measures deal with forest stands composition, structure and location, aiming to reduce fire risk and to increase vegetation resilience to fire.

#### Objective:

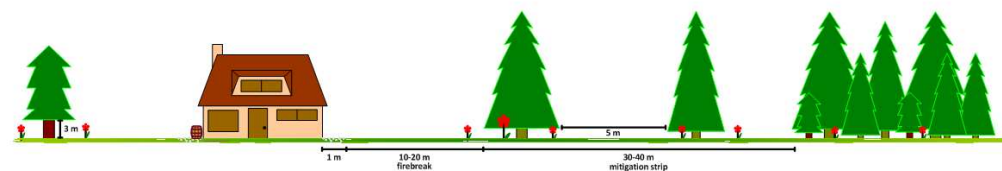
- Promote non-continuous strips to combat fire spread;
- Forest stands/ vegetation cleaning;
- Settlements/ stands division;
- Maintenance of infrastructures.

**Conservation measure:** structural

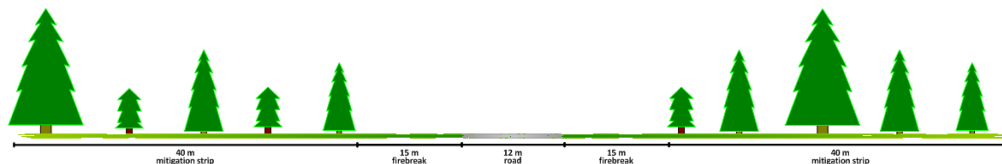
**Intervention:** reducing the fire risk

**Type of land use:** forest and agroforestry

Preventive Forestry measures – protection of houses and other buildings



Preventive Forestry measures – Primary Strip Network System for Fuel Management



PRIMARY STRIP NETWORK SYSTEM FOR FUEL MANAGEMENT	Mação Municipality			
	Internal (km)	150	Urban area and water masses (ha)	70
	Internal area (ha)	1 875	Agriculture (ha)	236
	Shared with other municipalities (km)	14	Forest (ha)	833
	Shared area (ha)	175	Shrubs and degraded forest area (ha)	824
	Total area (ha)	1 963		

Figure 1



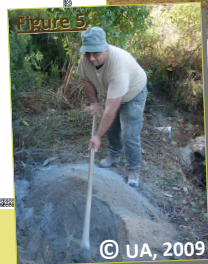
Figure 2



Figure 3



Figure 4



### Main results and analyses:

- Reduction of the fuel load;
- Reinforcement of the forest path system;
- Increase of the landscape resilience;

#### Monitoring

- Installation of:
  - small flume;
  - water level recorders;
  - meteorological station;
  - rainfall gauge network.

#### Legend:

Figure 1 – Informal discussions with local stakeholders

Figure 2 – Implementation of the Primary Strip Network System for Fuel Management

Figure 3 – Field work

Figure 4 – Primary Strip Network System for Fuel Management: mitigation strip

Figure 5 – Field work

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