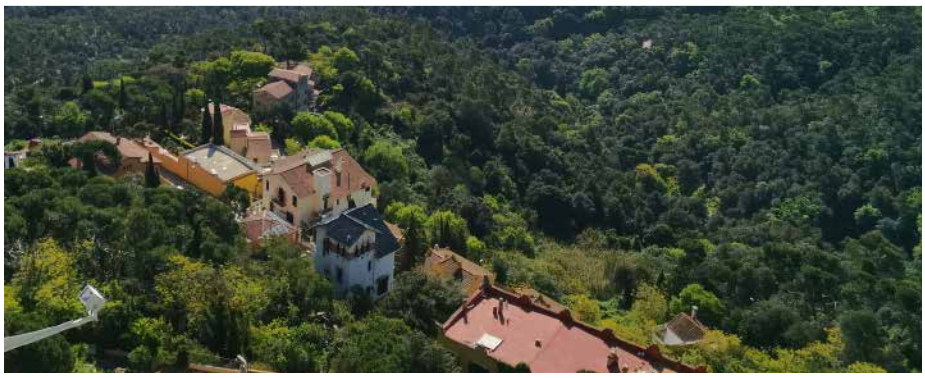
MANAGING FIRE RISK IN THE WILDLAND-URBAN INTERFACE

Wildfire prevention programme of the Barcelona government aims to **reduce vulnerability of high-risk interface areas.**



Wildland-urban interface in Barcelona. Image by *Alina Chereches* from Pixabay.

LOCATION

Catalonia, Spain

ACTORS

Diputació de Barcelona, Municipalities

BACKGROUND

Wildland-urban interface (WUI): where the built environment is in contact and interacts with forest areas.

WUI fires are an increasing problem in Europe and beyond as urban populations grow and cities expand towards forested areas. WUI areas are a challenge for multiple reasons: human settlement increases the chance of wildfires due to human ignitions; WUI fires pose a greater challenge to lives and homes as they are more difficult to suppress; and allowing natural fires to occur in these areas is not an option. There are two types of WUI: rural settlements mixing with forests and urban housing extending towards forested areas.

Approximately 1.1 million ha of WUI areas are located in Spain with Catalonia being among the biggest fire-prone areas in the Mediterranean basin.

In Catalonia, an average of 650 fires burns 11.5 thousand ha annually, while a small number of large-scale fire events account for most of the area burnt. Dangerous wildfire events are an increasing risk for Catalan communities, and the problem is pronounced in the interface areas.

Catalonia has developed a pioneering approach to establish a security buffer zone around buildings and settlements located in the WUI by reducing the surrounding fuel load caused by unmanaged vegetation.

CHALLENGE

The Mediterranean Basin is especially vulnerable to climate change, which is causing seasons to become warmer and drier, thus increasing the risk of wildfires.

This is a problem as a growing number of people live in the so-called wildland-urban interface, where high fire ignition risk is coupled with communities' high vulnerability to wildfires.

INNOVATIVE APPROACH

Legal requirement for security buffer zone

A law for the protection of WUI areas against wildfires, introduced in 2003 in Catalonia, makes it obligatory for communities to establish and maintain a security buffer zone of vegetation as well as carrying out security actions in unbuilt interior areas. Communities must also adopt a self-protection plan, take care of appropriate hydrant network in the area, clear dry vegetation from the buffer and interior zone, and keep roads and ditches free of vegetation. Non-compliance may be sanctioned.

DIBA support

Most of this work is carried out by local authorities, which often lack appropriate technical and financial resources. DIBA, the Provincial Deputation of Barcelona, has established a **PPU programme** to support communities to establish and maintain these protective zones in high-risk areas.

Support is provided for first interventions to help with implementation and encourage residents in maintenance of the WUI.

From **2004** → **2021**

Wildfire prevention programme for residential areas and towns

Since 2004, DIBA's PPU programme has provided technical assistance and financial aid to hundreds of residential areas and towns. This ongoing effort may increase resilience of the communities living in the WUI.

PPU Programme

Programa de Prevenció d'Incendis *Forestals en urbanitzacions i nuclis de població*

Wildfire prevention programme *for residential areas and towns*

More information of the programme (in Spanish and Catalan):

- www.diba.cat/en/web/incendis/ppu

Reducing vegetation around buildings will help prevent fire risk in the wildland-urban interface. Photo: DIBA

PROS +

Local inhabitants may pay part of the operational costs.

Could easily be replicated elsewhere.

CONS −

Responsibility is assumed mainly by public authorities.

REFERENCES

Case studies compiled by EFIMed in collaboration with Diputació de Barcelona.
www.efi.int/wildfire-prevention

EFI

Diputació Barcelona