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Forest Fire Risk in the TTA Region

(Review 2019–2024 and Outlook 2025)

CONTEXT

The Tanger-Tetouan-Al Hoceima (TTA) region contains a substantial share of Morocco's national forest heritage and is among the most vulnerable areas to forest fire risks. These risks are exacerbated by climate change, human pressures, and recurring droughts. They threaten ecosystems, agricultural livelihoods, rural territorial stability, and the region's environmental security.

KEY DATA AND EARLY WARNING INDICATORS

A. TTA's National Significance

- **Regional Forest Area:** Approximately **564,000 hectares**, representing **10.3%** of Morocco's forest cover (estimated at 5.47 million hectares – source: HCEFLCD, 2023).
- **Reported Fires (2022):** The TTA region accounted for over **49%** of all forest areas burned nationally, with **more than 6,600 hectares destroyed** (out of a national total of 13,000 ha).
- **Most Affected Province:** **Tangier-Assilah**, with over **40 fire outbreaks** recorded in 2022, followed by Larache, Chefchaouen, and Tetouan (source: ANEF).

B. Interregional Comparison

- TTA is one of the **three historical forest fire hotspots** in Morocco and records the **highest fire frequency per 10,000 hectares**.
- The **Rif forest massif**, particularly in the provinces of Chefchaouen, Ouezzane, and Al Hoceima, presents a **critical combination**: highly flammable species (cork oak, Aleppo pine), rugged topography, and limited firefighting infrastructure.

ECONOMIC, SOCIAL, AND ECOLOGICAL IMPACTS

A. Forest Losses

- **Area destroyed (2022–2023):** Around **10,200 hectares** burned in the region, with a **35% increase in fire outbreaks in 2023** compared to the 2018–2020 average.
- Loss of valuable species such as **cedar** and **cork oak**, aggravating **soil fragility** and erosion risks.

B. Ecological Effects

- Disruption of **ecological corridors**, especially those supporting endemic species migration.
- Increased risks of **water erosion**, landslides, and accelerated deforestation.

REFORESTATION POLICIES AND LIMITATIONS OF COMPENSATION MEASURES

A. Reforestation Efforts in TTA :

- **Annual program (2020–2023):** Between **4,000 and 5,500 hectares** reforested **per year** in the region (source: ANEF).
- The **Forests of Morocco 2020–2030 Plan** targets a cumulative **50,000 hectares** for reforestation in the region. However, the current pace **lags behind the rate of destruction**.

B. Observed Limitations :

- Reforestation often **unsuitable for ecologically sensitive zones** (species selected lack resilience).
- **Insufficient post-planting monitoring and maintenance**, and a lack of **sustainable community engagement**.
- No clear **territorial correlation** between burned areas and reforested zones.

REGIONAL GOVERNANCE: PROGRESS AND CONSTRAINTS

The TTA region has adopted an **Integrated Regional Forest Protection Plan (Regional Development Plan –PDR, 2022–2027)** structured around:

- Development of **municipal-level risk maps**;
- Upgrading of **firefighting infrastructure** (forest roads, water tanks, lookout towers);
- **Community awareness programs** and the **training of local monitoring committees**.

CONCLUSION

The rising frequency and intensity of forest fires in the TTA region are no longer isolated incidents, but structural indicators of **territorial and ecological imbalance**.

To address this, the region must **scale up its response**: shift from reactive measures to an **integrated, localized, and participatory strategy**, aligned with the **Forests of Morocco 2030 Plan**, the **PDR 2022–2027**, and Morocco's national climate ambitions.

Sources : ANEF and Impact Plus analyses