

## **Deliverable summary D2.2**

# Framework for economic assessment of the impact of invasive or emerging forest PnPs

Project acronym: **HOMED** 

Project full title: Holistic Management of Emerging forest pests and Diseases

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Project coordinator: Herve Jactel (INRA)

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Work package: WP2
WP leader: INRA
Lead beneficiary: WU
Partners involved: WU
Version: 01

| Dissemination Level   |    |
|---|----|
| PU Public   | PU |
| CI Classified, as referred to Commission Decision 2001/844/EC                           |    |
| CO Confidential, only for members of the consortium (including the Commission Services) |    |





### 1. Summary

#### Objectives:

This deliverable describes a 'Framework for economic assessment of the impact of invasive or emerging forest PnPs' to provide a general guideline for conducting economic analyses in the context of PnP risk analysis and risk mitigation management.

Invading and emerging PnPs impose serious economic consequences, due to impacts on market systems (e.g. related to timber production), nonmarket systems (e.g. biodiversity, recreational values, aesthetic values) and ecosystem service provisioning. These consequences differ among stakeholders and regions and are dynamic over time. Due to this complexity, economic impacts are assessed in a specific contextual setting (perspective) and are often fragmented by focussing on explicitly selected consequences. This hampers comparison between studies and can lead to misinterpretations due to implicit and explicit assumptions that are made in relation to the defined study perspective (e.g. scope, scale, time horizon) and applied valuation methods.

The described framework aims to make decision-makers better aware of the assumptions underlying economic assessments, providing a way to understand and compare existing studies as well as a guiding principle on assessment approaches related to the impact of invasive or emerging forest PnPs.

In a later stage of HOMED, this framework will be used as a guideline to assess in a transparent way the potential economic impact of a PnP and/or the net economic benefit of potential mitigation measures given a selected PnP case study. For these intended case studies, the fundamental information on spread dynamics will be obtained from the spread models that are currently under development in WP2.

#### Rationale:

The framework was developed using literature research. Relevant literature was derived by searching for 1) review papers and reports focussing on "Economics of invasive species" in general and 2) research papers evaluating the economic consequences of invasive forest pathogens, reflecting specific PnP case studies.

#### **Teams involved**:

This deliverable was prepared by WU.