WHAT IS DEFORESTATION?

JUNE 2025

Deforestation is most appropriately defined as the permanent loss of forest due to its conversion to other land uses.

Although Global Forest Watch identifies that there may be over 800 competing definitions of deforestation[1], the definition of deforestation above reflects the core elements adopted by the leading Australian and international organisations for forests[2], characterised by the occurrence of all three of the following key elements: permanence, loss and conversion. It is important to note that the term land clearing is a broader concept than deforestation as it encompasses non-forest natural habitats, such as grasslands, wetlands and shrublands[3].

Forest cover loss is another concept different to but related to deforestation[4]. Whether an identified forest loss equates to deforestation depends on whether the removal of trees is permanent due to a land use change that follows the loss. For example, in Australia, the major direct drivers of forest loss that do not result in deforestation are wildfire and clearfall timber harvesting[5]. These losses are not deforestation because the affected areas ultimately remain as forest following natural or human-induced regeneration, albeit altered in features such as age class and structure. All the leading organisations on forest issues explicitly exclude sustainable timber harvesting and wildfire from the definition of deforestation because these events do not represent permanent conversion of forests to other land uses[2].

Some bodies do include clearing of native forests for plantations within their definition of deforestation[6], although this is excluded from definitions of deforestation adopted by leading international organisations such as the United Nations Food and Agriculture Organisation (FAO). Notwithstanding, native forests are no longer cleared to establish timber plantations in Australia.

Peer-reviewed analysis indicates that Australia has lost almost 40% of its forest as a result of deforestation since European settlement[7]. Initially this deforestation was driven by colonial needs for land and wood. The vast majority – 98% – of Australia's deforestation has occurred on private freehold and leasehold land, not the public forest estate[8].

Forest degradation, which refers to changes that negatively affect the ecological function of a forest[9], is another concept that is often discussed in tandem with deforestation. Forest degradation includes changes to forests that result in reduced biodiversity, soil stability, water, social amenity, carbon storage and productivity[10]. The direct drivers of forest degradation differ from those of deforestation and include natural disturbances such as severe fire and flood, activity by invasive animals such as deer, pigs and horses, some types of timber harvesting and other human activities[11]. In many countries, forest degradation can be a precursor to deforestation, particularly where people who are land poor establish crops or graze domestic animals within a forest to meet subsistence needs.

However, not all forest disturbance results in forest degradation. In many forest types, disturbance is an important part of natural regenerative processes. Distinguishing between forest degradation and well-managed forests that are regenerating following disturbance is essential to accurate assessments of forest degradation[12]. Yet, the distinction between forest disturbance and degradation is rarely able to be discerned in reports of forest degradation[13] because most assessments are conducted via desktop analysis and are not subject to field verification[14].

Such distinctions are also difficult because there is no formally agreed international definition of forest degradation. The Intergovernmental Panel for Climate Change (IPCC) defines land degradation, which is intended to include forest degradation[15], while the FAO advises that forest degradation should be defined by each country[16]. There is no current, consistent or agreed definition or methodology for assessing forest degradation in Australia[17]. A further complicating factor is that forests are also often defined differently between countries and organisations[18].

Australia has been labelled a deforestation front, and the only industrialised country to feature on top-10 lists of forest loss.

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This is due largely to land clearing activities on private land in NSW and Queensland.'[19] However, different application of methods and definitions fundamentally changes whether Australia features on such lists. For example, in a different analysis based on FAO data sourced from the World Bank, Australia does not feature within the top 20 countries for forest loss[20].

There has been a tendency for definitions of deforestation in Australia to be inconsistently applied, especially in relation to identifying differences between forest loss, deforestation and degradation[21]. In labelling Australia as a 'deforestation front', the term 'deforestation' is used by those reporting this claim to describe both actual deforestation and forest disturbances that result in temporary forest cover loss, such as regulated timber harvesting. For reasons described here, the conflating of these different terms is misleading and inconsistent with agreed definitions.

Additionally, annual reporting of tree cover loss is often not matched by annual reporting of tree cover gain, which results in an unbalanced view of forest change dynamics[22]. This inconsistent application is unhelpful because it prevents the ability for most people to make real comparisons of deforestation over jurisdictions or over time and often creates a misleading view of the true status of forests.

Regardless of differences in definitions and reporting methodologies, it is generally agreed that deforestation and forest degradation are the biggest threats to forests worldwide. Deforestation is recognised as a primary cause of biodiversity loss and carbon emissions and can exacerbate other environmental challenges such as soil erosion and pollution of waterways[23]. Habitat loss, fragmentation, and degradation are the most commonly identified threats to species listed as threatened under Australian environmental law and are the second-highest impact threat category, behind invasive species and disease[24].

Deforestation is regulated at the State level in Australia, and there are very clear links between legislation, regulations and policy settings influencing deforestation rates[25]. For example, from 2010 legislative de-regulation across most States shifted approaches to deforestation from 'command and control', to voluntary compliance and self-regulation. A further key underlying driver of deforestation includes high commodity prices for agricultural products that in turn incentivise farmers to clear their land for agricultural expansion and urban development[26].

Independent third-party certification schemes and initiatives like the EU Regulation on Deforestation-free Products[27] play a pivotal role in addressing deforestation and forest degradation. In Australia, Responsible Wood and the Forest Stewardship Council are the two primary schemes for certifying Australian forest management and timber supply chains. Both these schemes maintain Standards that compel certified entities to prevent deforestation and forest degradation[28].

Reducing deforestation is crucial to reversing trends of biodiversity decline and negative effects from climate change. However, a lack of rigour in the application of definitions and reporting methodologies can threaten the effectiveness and credibility of pledges to end deforestation[29]. To ensure the focus of funding, policy development, monitoring and management is genuinely directed to the areas of most risk, it is imperative that consistent definitions are applied and aligned globally.

Forestry Australia is a not-for-profit, independent professional association representing more than 1,100 scientists, practitioners and farm forest growers who manage, study and care for our forests. Our members are individuals who operate across all aspects of forest, fire and land management, farm forestry and tree growing throughout Australia. They have high levels of scientific expertise and extensive operational experience in forest, fire and landscape management.

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Australia's independent forest certification bodies:
Forest Stewardship Council - Deforestation takes place when forests are converted to non-forest uses, such as agriculture or urbanization (Deforestation and forest degradation | fsc.org)
Responsible Wood – Deforestation is the permanent clearing of a forest, which results in a land-use change for non-forest purposes, such as urban expansion and infrastructure development. (Microsoft Word - Responsible Wood Statement on Deforestation and Forest Degradation - January 2024.docx)
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Explanatory notes **1**. Includes permanent reduction of the tree canopy cover below the minimum 10 percent threshold. **2**. It includes areas of forest converted to agriculture, pasture, water reservoirs, mining and urban areas. **3**. The term specifically excludes areas where the trees have been removed as a result of harvesting or logging, and where the forest is expected to regenerate naturally or with the aid of silvicultural measures. **4.** The term also includes areas where, for example, the impact of disturbance, over-utilization or changing environmental conditions affects the forest to an extent that it cannot sustain a canopy cover above the 10 percent threshold. (Global Forest Resources Assessment - FRA 2025 - Terms and Definitions (fao.org))
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