## **SDG215**

Martine Berge, Torjus Gravelsæter, June Vatsø Haugum, Eirik Hovland and Kaja Jurak.

# The role of global south and north in fighting deforestation

Human society heavily depends on forests and their inherent biodiversity. Forests are deeply interconnected with our food system, and the components of its biodiversity in the water, carbon and nutrient cycles provide beneficial functions to all people. We use products derived from products of the forest resources for food, medicine, or shelter and it generates income. Particularly in developing countries wood fuel is important for sale and household use. Further, we do not only depend on forests for today's life, but they play a major role in sustainable development and therefore for the future of humanity. For instance, when talking about the challenge of feeding the growing population one must consider that forests contribute through nutritious food, employment, income, energy and ecosystem services to all four dimensions of food security, namely availability, access, utilization and stability. (FAO, 2020a)

Yet only 31% of global land area, which amounts to 4.06 billion hectares, is covered by forests in 2020. In comparison, 10,000 years ago the forest coverage of the world's habitable land was around 57% and it is estimated that since 1990 there was a loss of 420 million hectares of forest through conversion to other land use (FAO, 2020b), (OWID, 2020a). The rate of deforestation per year between 2015 and 2020 was estimated at 10 million hectares, the net loss was around 5 million hectares. Roughly 95% of this affects the tropical forests (FAO, 2020b), (OWID, 2020b).

But why are forests being cut down if we rely on them so much? A major driver for deforestation is agriculture. For instance, 41% of tropical deforestation is driven by beef production. Palm oil and soybeans are responsible for another 18%. But also logging across the tropics for wood or paper accounts for 13% (OWID, 2020b). In 2018 agriculture took up nearly half of the world's habitable land, 77% of this land is used for livestock, 23% for crops of human food (OWID, 2020c). Additionally, the development of infrastructure and hydropower are causes for deforestation as well as wildfires.

### Actions to prevent deforestation

There are many organizations working with different approaches on how to prevent and halt deforestation, and in this section we will highlight a few of them.

The conservation organization WWF (World Wild Fund for Nature) is working with a broad spectrum of actors to achieve their approaches and goals. Some of the approaches they contribute with is encouraging sustainable bioenergy, sustainable infrastructure and making sure conservation areas are being maintained by funding. The organization has also used key solutions that are able to benefit and motivate the marketplace. The WWFs Global Forest & Trade Network-North America program is designed to develop and share sourcing and producing of forest products in a responsible way, engaging various companies and institutions (a.WWF, no year).

In July 2019 the European Commission adopted "EU Communication (2019) on Stepping up EU Action to Protect and Restore the World's Forests". This communication targets to protect the existing forests, with a focus on the primary forests. The communication also targets to

increase sustainable forests worldwide that have a broad biodiversity (a. European Commission, no year).

REDD+ is a programme first developed under the name REDD under the UNFCCC in 2005, later expanding to REDD+. The European Commission is financing many millions a year to countries in Africa, Asia and Latin America for the countries to maintain their forests (b. European Commission, no year). The main idea behind this program is that developing countries receive compensation for preserving its forest. The goal is to make it profitable and attractive to preserve forest (Regjeringen, 2019).

The sustainable development target 15.2: "By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally" has the goal to maintain biodiversity and prevent land degradation. UN members are working towards achieving this goal by 2020 (United Nations, no year).

## Deforestation in the global north and global south

A whopping 54% of all deforestation in the world has its origin in South America, the biggest contributor is Brazil (Phillips, 2019). Even though Brazil passed the Forest Code in 1965 requiring Brazilian landowners in the Amazon to keep 35 to 80% of their land as native vegetation (The Nature Conservancy, no date) to ensure that the rainforest is protected. But still, we see massive deforestation in Brazil because of the increasing need for land for livestock and food for livestock consumption. Historically it has been close to impossible to monitor and uphold the Forest Code given the enormous size of the Amazon rainforest. That is why Brazil created a mapping software in 2010 to uphold the Forest Code (The Nature Conservancy, no date).

A finding from the article "Climate Change will hit Mediterranean forests hardest." indicated that Mediterranean forests are at risk of desertification, forest fires and pest outbreaks, because of its low capacity of adapting to climate change (Science for Environment policy, 2010). One of the ways Europe protects and manages its forests is through the creation of protected areas. These areas are part of a network of protection areas called Natura 2000, and it reaches all over Europe (Practices and Sustainable, 2010). But only around 12% of European forest is protected according to a study from 2003 (Vienna, 2003). This is nothing compared to one of the smallest countries in the world, Bhutan. Bhutan keeps above 51% of its forest protected (b.WWF, no date).

### Norway's preservation of its own forest and of tropical forest

Now we will take a deeper look into the situation in Norway. Norway's government has a program called the climate- and forest initiative (Klima- og skoginitativet) (Regjeringen, 2019). This program focuses on reducing deforestation of tropical forests. Deforestation of the tropical rainforest is accountable for 11% of annual emissions. Preventing deforestation of tropical rainforest is Norway's biggest international climate initiative. Norway funds an international program called *Reducing emissions from deforestation and forest degradation* (REDD+). Since 2008, Norway has contributed 3 billion NOK annually to the REDD+ program and has promised to continue this funding until 2030.

But how is the situation with Norway's own forest? The forest in Norway is called boreal forest (Steel, 2018). One of the major differences between this forest and tropical rainforest is that the carbon in boreal forest is mainly stored below ground, while in the tropical rainforest the carbon is mainly stored above ground. The old growth forest in Norway is important for many species and it also stores the most carbon per square meter. This forest faces many threats, and 84% of the threatened forest species in Norway are dependent on the old growth forest.

Norway has received international criticism for the lack of protection for its own forest. In 2017, the Norwegian government decided to preserve 10% of Norwegian forest, which scientists say is the minimum for preserving the species. Today, only 3,5% of the forest is preserved. However, in the decision to preserve 10% of the forest it is not specified what kind of forest. Since only 9% of the forest in Norway is old growth forest, it is critical for many species that this forest is preserved. Funding for preserving Norwegian forest has increased over the last few years (Myhre, 2018). In 2012, 120 million NOK was set aside for preserving forest, while in 2019 the amount had increased to 467 million NOK. Even with this increase, scientists project it will take 30 years before 10% of the forest is preserved.

#### Conclusion

A substantial amount of deforestation occurs in the global south, especially in the tropical forests. There are numerous initiatives aiming to protect forests and stop deforestation and the global north contributes a significant part to the funding. Still, deforestation happens at a rapid rate, especially in the tropical forests, even though corresponding agreements are passed by the countries. Thus, the importance of further action in the global south as well as financial help from the global north, such as Norway, is important. Nevertheless, one should not forget to preserve the local forests in the global north. The way of carbon storage in the boreal forest for example contributes to the negative impact of deforestation there, since it highly depends on the old growth forests and cannot be compensated equally by young forests. Therefore, it should be stressed that it is also urgent to take action, provide funding and start protecting the forests in the global north in order to fight climate change, achieve the sustainable development goals of the UN and preserve the biodiversity on which we as humans rely so much.

#### Sources:

- b. European Commission (no date) *Combatting tropical deforestation: the REDD+ initiative.* Available from: <a href="https://ec.europa.eu/clima/policies/forests/deforestation\_en">https://ec.europa.eu/clima/policies/forests/deforestation\_en</a> (10.05.2021).
- a. European Commission (no date) *Deforestation and forest Degradation*. Available at: <a href="https://ec.europa.eu/environment/forests/deforestation.htm">https://ec.europa.eu/environment/forests/deforestation.htm</a> (10.05.2021).
- a.FAO (2020) The State of the World's Forests, Forest biodiversity and people. Food and Agriculture Organization of the United Nations, 2020.
- b.FAO (2020) The state of the world's forest. Available at: <a href="http://www.fao.org/state-of-forests/en/#:~:text=Forests%20cover%2031%20percent%20of%20the%20global%20land%20area">http://www.fao.org/state-of-forests/en/#:~:text=Forests%20cover%2031%20percent%20of%20the%20global%20land%20area</a> (08.05.2021).

Myhre, T. (2018) *Mindre penger til skogvern i stasbudsjettet* i Harvest Magazine. Available at: <a href="https://www.harvestmagazine.no/artikkel/statsbudsjettet-mindre-penger-til-skogvern">https://www.harvestmagazine.no/artikkel/statsbudsjettet-mindre-penger-til-skogvern</a> (09.05.2021).

a.OWID (2020) The world has lost one-third of its forest, but an end of deforestation is possible. Available at: <a href="https://ourworldindata.org/world-lost-one-third-forests">https://ourworldindata.org/world-lost-one-third-forests</a> (08.05.2021)

b.OWID (2020) Cutting down forests: what are the drivers of deforestation? Available at:https://ourworldindata.org/what-are-drivers-deforestation(08.05.2021).

c.OWID (2020) Deforestation and forest loss. Available at: https://ourworldindata.org/deforestation (08.05.2021).

Phillips, L. (2019) *Deforestation In South America*. Available at: https://storymaps.arcgis.com/stories/911c70f4813d4036a80ce627e3b4d99d (09.05.2021).

Regjeringen (2019) *Hvorfor Norsk regnskogsatsing?* Available at: <a href="https://www.regjeringen.no/no/tema/klima-og-miljo/klima/klima-og-skogsatsingen/kos-innsikt/hvorfor-norsk-regnskogsatsing/id2076569/">https://www.regjeringen.no/no/tema/klima-og-miljo/klima/klima-og-skogsatsingen/kos-innsikt/hvorfor-norsk-regnskogsatsing/id2076569/</a> (09.05.2021).

Science for Environment policy (2010) Forest Protection in Europe, (23). https://ec.europa.eu/environment/integration/research/newsalert/pdf/23si\_en.pdf (10.05.2021).

Steel, C. (2018) Skog Available at: https://www.sabima.no/trua-natur/skog/ (09.05.2021).

The Nature Conservency (no date) *Brazil's Forest Code*. Available at: <a href="https://www.nature.org/en-us/about-us/where-we-work/latin-america/brazil/stories-in-brazil/brazils-forest-code/">https://www.nature.org/en-us/about-us/where-we-work/latin-america/brazil/stories-in-brazil/brazils-forest-code/</a> (09.05.2021).

United Nations (no date) Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss. Available at: <a href="https://sdgs.un.org/goals/goal15">https://sdgs.un.org/goals/goal15</a> (10.05.2021).

Vienna, L. U. (2003) 'Protected Forests in Europe Protected forest areas A means for nature conservation', *MCPFE*, p. 6.

a.WWF (no date) *Deforestation and Forest Degradation*. Available at: <a href="https://www.worldwildlife.org/threats/deforestation-and-forest-degradation">https://www.worldwildlife.org/threats/deforestation-and-forest-degradation</a> (10.05.2021).

b.WWF (no date) Bhutan: Committed to Conservation | Projects | Available at: <a href="https://www.worldwildlife.org/projects/bhutan-committed-to-conservation">https://www.worldwildlife.org/projects/bhutan-committed-to-conservation</a> (10.05.2021).