More needs to be done to halt global biodiversity loss and meet Aichi targets

The Aichi biodiversity targets, set by the UN Convention on Biological Diversity, are unlikely to be achieved by 2020, a new study suggests — despite some progress towards halting the global loss of biodiversity. The authors of the study call for policy responses to be strengthened if the ongoing loss of nature is to be stopped.

The loss of biodiversity affects the healthy functioning of ecosystems and the benefits they provide to people. The ongoing loss of the world’s natural diversity, which underpins all life, prompted Parties to the UN Convention on Biological Diversity (CBD) at the World Summit for Sustainable Development in 2002 to pledge reductions in the global decline in biodiversity by 2010.

The 2010 targets set by the CBD were missed. Consequently, a new set of goals to curb the loss of species and ecosystem services, supported by the 20 Aichi targets, were adopted by 193 nations in 2010. The Aichi targets, to be achieved by 2020, are part of the global Strategic Plan for Biodiversity 2011–2020.

A global panel of 51 experts, drawn from a wide range of institutions, has recently assessed mid-term progress towards meeting these targets. They based their assessment on an analysis of 55 indicators (for example, extent of wetlands) selected from 163 potential indicators, which are key measures of the world’s biodiversity. They built statistical models for each indicator, based on their status in 2010 and data trends and then projected changes to the indicators by 2020. The value for each indicator in 2010 was then compared with the projected value in 2020 to assess progression towards the 2020 Aichi targets.

Although there have been improvements in responses to the biodiversity crisis, the analysis revealed no significant improvement in reducing the pressures on biodiversity. This suggests that, overall, the 20 Aichi targets are unlikely to be achieved by 2020 unless efforts to tackle these problems are strengthened and very broad actions are taken across many targets.

Among the positive responses were strong trends for the increasing coverage of freshwater, marine and land protected areas which contribute towards Aichi target 11 (related to protected areas). Positive trends were also seen in sustainable management practices, including a projected increase in the area of certified and responsibly managed forests, and areas under organic and conservation farming — these contribute towards target 7 (sustainable management of agriculture, aquaculture and forests). Efforts to raise public awareness of biodiversity (target 1) were also increasing.

Nevertheless, indicator trends in many areas also revealed increasing pressures on global biodiversity. These included rising trends in production and consumption, evident from the ecological and water footprint indicators (affecting target 4 — sustainable production and consumption) and increased bottom trawling (affecting target 6 — covering sustainable management and harvest of fish stocks).

Nitrogen surplus pollution is also increasing, affecting target 8 (reducing pollution). Increases in introductions of invasive species have also been seen, affecting target 9 (controlling or eradicating invasive species).

Although the researchers say that the Aichi 2020 targets are unlikely to be reached if current damaging trends continue, they also suggest that where there are positive trends, the beneficial effects on biodiversity might only become evident after 2020. These benefits would be the result of the time lag between implementing policy responses and the resulting changes in the state of the world’s biodiversity.

The results of the fourth Global Biodiversity Outlook, to which this study contributes, suggest that the pressures on biodiversity must be addressed if the CBD’s objectives are to be met. This would require changes in society, such as more efficient use of land, water, energy and materials, plus a major rethink of consumption habits and food production systems.