

Protecting biodiversity: beautiful pictures concealing a reality made of violence and ineffectiveness

A brief history of conservation

A few days after the “[The One Planet Summit for the Ocean](#)” (sometimes also called the “One Ocean Summit”) was held in Brest, France, that sought to “mobilise the international community and take tangible action to mitigate [such] pressures on the ocean” and launch several “important initiatives ... in favour of marine ecosystem protection and sustainable fisheries, intended to fight pollution, in particular from plastics, respond to the impacts of climate change, as well as advocate for improved governance of the oceans”, it seemed essential to [hungerexplained.org](#) to pause a minute and reflect on the issue of **conservation** - or **protection**, depending on the context - **of our environment**.



Without going back to a long tradition of respect of the environment that remains strong for some peoples until today¹ and to some isolated conservation initiatives dating back to the 18th century [[read](#)], one may consider that the environmental conservation movement, as we know it now in the western cultural context, can be traced back to the middle of the 19th century, when the British became aware that human activity impacted on Indian forests and believed that it was their duty to preserve the environment for future generations. This view led to the implementation of a forest conservation programme by 1842 [[read](#)]. At about this time, in the US, Thoreau was describing in great details “nature” in his famous book “[Walden: or, life in the woods](#)”.

¹ See for example the concept of Pachamama [[read](#)].

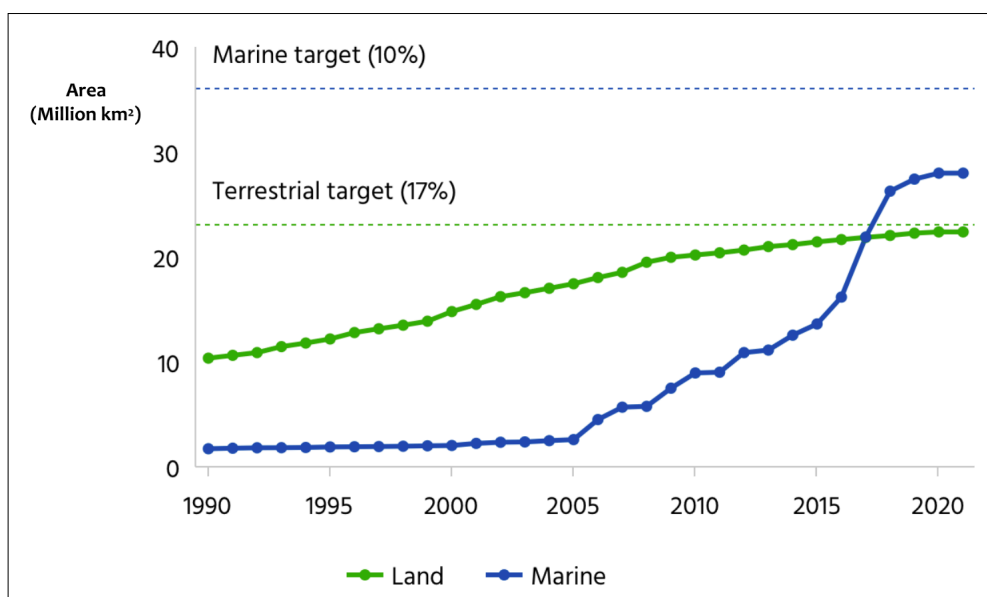
It is by the end of the 19th century that a series of national parks are established in North America and Australia [\[read\]](#) in a context that had a flavour of colonialism and was supported by the idea that nature protection should, in priority, occur in areas “void of population” or lacking any particular economic importance, as these characteristics contributed to reduce costs for their promoters. It is also worth noting that the first African national parks often corresponded to previously reserved colonial hunting areas.

In 1948, the IUCN ([International Union for Conservation of Nature](#)) is created with the aim “to encourage international cooperation and provide scientific knowledge and tools to guide conservation action”. Since then, this organisation has been analysing the effect of human activities on the environment and launching actions to protect endangered species. It has become, today, the main source of data on the risk of extinction of species at world level. At the beginning of this century, it developed a strategy seeking to involve the private sector. It groups now “more than 1,300 Members – including states, government agencies, NGOs and Indigenous Peoples’ Organisations – and over 15,000 international experts” [\[read\]](#), and it has an annual budget of around \$120 million [\[read\]](#). The IUCN has the ambition to have more than 30% of the planet’s surface under protected and conserved areas by 2030.

A few years after IUCN, in 1961, the WWF ([World Wildlife Fund for Nature](#)) is established. This NGO, which is currently the biggest environmental protection organisation (annual budget of almost \$350 million [\[read\]](#)), has a foundation and a large network of several million members. Its declared objective is to “stop the degradation of the earth’s natural environment and to build a future in which humans live in harmony with nature” [\[read\]](#).

Nowadays, there are numerous environmental organizations and their list is continuously getting longer [\[read\]](#), while protected areas reached at least 22.5 million km² of terrestrial area (almost 17% of the total) and 28.1 million km² for coastal and marine areas (nearly 8% of the total) [\[read\]](#). These achievements are close to objectives set in the case of terrestrial areas, the areas covered having relatively regularly increased during the last three decades and they follow a strong progression, since 2005, for marine areas which had, until then, benefited from limited conservation programmes (Fig.1).

Fig. 1: Evolution of protected areas



Source: [Protected Planet Report 2020](#).

It is important to note that protected areas include “national parks and forests, wildlife refuges, marine areas, private and non-governmental organization (NGO)-governed preserves, indigenous peoples’ protected areas, community lands and other areas where the protection of nature and the practice of sustainable livelihoods foster ecosystem integrity” [\[read\]](#).

At national level, the portion of land that is protected is quite variable: 50% in Bhutan, 41% in Zambia, 38% in Namibia, Tanzania and Germany, 30% in Brazil, 29% in the United Kingdom, 27% in France, 16% in China, 13% in the US, 12% in Kenya and 11% in Russia, for example.

A field where different approaches coexist

Historically, the principles guiding conservation evolved, moving from a centralised government-led approach, close to that initially promoted by IUCN, where conservation dominates, people are totally excluded, visitors and tourists are kings, and management is in the hands of scientists, to a system that, at least on paper, better integrates the local population in governance, takes into consideration economic, social and cultural objectives and gives a central role to a variety of partners (private sector, NGOs, local governments, etc.) involved in funding [\[read\]](#). From this point of view, the [5th IUCN World Parks Congress, Durban](#), in 2003, marked an important turning point.

Behind these two dominant models, different opinions conflict on what conservation is supposed to be.

There are those, frequently categorised as ecocentric, who want to preserve by denying access and banning any use of the area considered, or even wish to rehabilitate it so that it recovers its claimed prior earlier condition (for instance by reforesting areas where forest has disappeared or is very much degraded).

Others, often categorised as anthropocentric, want to protect while accepting an “appropriate” use of natural resources according to well-defined rules (generally science-based). The latter, contrarily to the former, attach a high weight to the economic value of natural resources to be preserved. They are those who are in favour of dedicating national parks and other protected areas to tourism. They give a central importance in conservation to the market and to the evaluation of its economic benefits. This school of thought also includes those who want conservation to benefit the local population, without necessarily trusting market mechanisms.

These antagonisms can sometimes be quite vivid and must be placed in the context of the relations between conservation and development.

A 2019 survey of 9,264 conservation practitioners and academics conducted in 149 countries illustrates this diversity of perspectives among professionals involved in this field [\[read\]](#).

As expected, the results of this work showed that there was a solid consensus around the priority given to the protection of biodiversity and of ecosystem processes. More surprising is the agreement on the idea that humans are part of nature and not separate from it. This clearly makes a distinction between the persons surveyed and the mass of people, especially in western countries, who generally consider that humans are not part of nature.

The most polarising topics appear in the section of the survey dealing with themes such as the acceptability of displacing people for establishing protected areas, the need for strictly protected areas or for the existence of pristine nature yet untouched by humans.

The analysis of answers allowed authors to identify three main dimensions in how interviewees saw conservation (“**people-centred**”, “**science-led**” and “**conservation through capitalism**”), and to build a profile of those who favoured each of them.

“**People-centred**” conservation was mostly supported by women, often with a social rather than natural science background and by people from Africa, Asia and Latin America where conservation programmes are having a strong impact on local people.

“**Science-led**” conservation was more championed by men than by women, and by those who had a background in biology; younger interviewees were more represented than older ones in this profile. From a regional point of view, many came from North America and Oceania.

“**Conservation through capitalism**” was mostly elected by women without social sciences background, by the younger and the older, and by interviewees from Africa. This last characteristic is probably linked to the importance of tourism in East and Southern Africa, from where most originated [[read](#)].

Main critiques of conservation

Interviewed on French radio France Culture on February 4 last [[listen in French](#)], Guillaume Blanc, an environmental historian teaching in Rennes, France, summed up critiques of conservation and protected areas. He stressed the fact that, in rich countries like France, protected areas such as regional parks were frequently inhabited and the human footprint very visible in them (in other words more weight is given to people and to economic aspects), while in poor countries (e.g. in Africa), protected areas were generally emptied of their population who is expelled and whose intrusions are criminalised (this corresponds to a mix of science-led and conservation through capitalism, supported by a narrative tinted with people-related concerns). Around 50% of protected areas in the world have been established on land traditionally held and used by indigenous peoples [[read](#)].

According to Blanc, it is estimated that “at least one million people have been driven out of African parks” during the 20th century with the blessing of organisations like the IUCN, WWF and UNESCO, suffering from “voluntary displacements” managed by their governments often under the influence of local and international tour operators.

These evictions are still on the agenda, as illustrated by current (early 2022) threats on around 70,000 Maasai and their 200,000 cattle in the district of Ngorongoro, North of Tanzania. These expulsions would violate Tanzanian law as well as several international conventions [[read](#)].

This shows how statements that claim that parks are “for and by the people” are often just empty communication slogans that do not correspond at all to a reality where cultivation and livestock rearing are forbidden to the locals.

There are, of course, some offers made for jobs as rangers or tourist guides, or to be part of some cultural group singing and dancing for visitors. However, this creates an extremely

fragile situation of dependency well illustrated by what happens during the pandemic when touristic activity has all but disappeared.



Moreover, this approach does not respect conservation principles, as tourism disrupts (and pollute) protected zones, its wildlife and flora. This makes Blanc say that “this is an ecological aberration coupled with social injustice”, as, in the end, “those who destroy are those who protect” while collecting profits, tourism being - outside of the pandemic period - a very lucrative and unequal business [\[read\]](#). This modality may also weaken the interest of the population for the area concerned by bringing it down to its financial dimension, when it is widely known that indigenous peoples’ ancestral lands include best preserved ecosystems and that these peoples implement the most effective and sustainable ways to conserve [\[read\]](#). Let’s remember here that, in 2014, less than 5% of protected areas in the world were managed by indigenous peoples and local peoples [\[read\]](#). Note also that, in some cases, the creation of such zones was sometimes linked to the establishment of hunting reserves for a few very rich people [\[read here \(pp. 6-9\)\]](#) and [here](#).

In 2016, the Report of the Special Rapporteur of the Human Rights Council on the rights of indigenous peoples, Victoria Tauli-Corpuz [\[read\]](#) reiterated earlier revelations claiming that protected zones “are associated with human rights violations against indigenous peoples in many parts of the world”. These violations include in particular “Expropriation of land, forced displacement, denial of self-governance, lack of access to livelihoods and loss of culture and spiritual sites, non-recognition of their own authorities and denial of access to justice and reparation, including restitution and compensation.” These violations are due, according to the Rapporteur, to the non-respect of rules set at the time of the establishment of these zones. She noted that “Leading conservation organizations have adopted commitments and policies seeking to adopt a ‘new paradigm’ of undertaking conservation, while respecting the rights of indigenous peoples. However, significant gaps remain between these policies and their effective implementation on the ground.” Too often, protected areas are created by denying indigenous peoples’ rights on their land, in violation of the principle of participation and free, prior and informed consent which is part

of the protected zones policies defined by IUCN. This way of doing is clearly consonant with a quasi-colonialist attitude.

Are conservation efforts missing the point?

When people talk of biodiversity conservation, they think of tigers, gorillas, pandas, orang-utans, elephants and other particularly charismatic and emblematic species that attract moneys of millions of small donors, foundations and governments. This approach is, however, sometimes criticized for missing the point, as the list of endangered species is long, and many such species do not spark much interest [\[read\]](#).



Measures of protection of emblematic species certainly benefit entire ecosystems (tropical forests, savannahs, etc.) that are identified and gathered in protected zones where myriads of animals and plants live that otherwise would be at risk of disappearing as they cannot capture by themselves the resources required to preserve them.

The question is, however, that this conservation approach tends to focus on “wild” areas or considered as such. It conceals the reality and intensity of the loss of global biodiversity that is particularly acute in inhabited areas and that threatens processes that are vital for humanity. This loss is not to be measured only by the number of endangered species, but also by **the sharp fall in the population of species that, for the time being, are still quite common**, but that, as their population declines, are not any more able to provide services indispensable to the well functioning of our environment, including to the production of our food.

The emblematic species, in this case - but they are quite incapable of mobilising the funds required to protect them through their charisma - are the bees and other insects, earthworms and common birds found in our countryside [\[read pp. 6-11\]](#). The rapid collapse of their population is a threat for humanity, as it affects food production processes as well as those generating greenhouse gases that are responsible for climate change.

Yet, we continue to discharge millions of tons of chemical substances that pollute our soils and surface waters [[read pp. 5-7](#)], poisoning wildlife and flora (including the not very charismatic microorganisms and mushrooms that play such a key role in plant nutrition and in the carbon cycle), while boasting on how fast our protected zones grow!

A crazy world that refuses to face reality!

One cannot help drawing a parallel between the mode of operation of natural resources and biodiversity conservation, and the functioning of the carbon market, the effectiveness of which does not need to be proven any more [[read](#)]. In both cases, the mechanism in place misses the point, marginalises vulnerable people and generates profits for a minority.

Conclusion

The biodiversity conservation movement, launched towards the end of the 19th century, brought about the establishment of protected areas that cover more than 1/6th of terrestrial area and close to 1/12th of marine areas. It followed a remarkable expansion during the 20th century, mobilising several million volunteers and donors, and saved a considerable number of species from extinction.

However, these remarkable achievements are not balanced. While in rich countries, protected areas are mostly inhabited by people that conduct their daily business as usual, in poor countries, they have been emptied of their population who, often driven out of their land with violence, lives in poverty, while a minority benefits from the touristic exploitation of biodiversity.

The figures showing a progression of protected areas unfortunately conceal a great ineffectiveness, as efforts made seem to miss the point. Indeed, conservation of biodiversity parked in protected areas is unable to combat the worrying fall of biodiversity everywhere in the world that causes a reduction of ecosystem services provided by various living organisms such as insects, earthworms, mushrooms and other microorganisms that have a key function in our environment and, in particular, in the production of our food.

If humanity continues to use technologies that produce toxic chemicals that spread in the environment, and if it persists in destroying habitats required for the survival of biodiversity, the planet will become a place where more or less protected enclaves will coexist with an environment where there will be less and less life whose capacity to ensure the survival of humanity will plummet dramatically.

The concern with preservation of biodiversity - and of the indispensable services it produces - must not be limited to protected areas but should be present everywhere in our environment, as well as in our minds.

[Materne Maetz](#)
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To know more:

- [Protected Planet Report 2020](#), Protected Planet, 2021.
- Blanc, G., [La préservation de la nature est-elle \(néo\)coloniale ? L'invention des parcs nationaux en Afrique](#). Revue internationale et stratégique, 124, 17-27 (in French).
- Fraser, E., [Displacement and Dispossession in Tanzania: How “Conservation” is Destroying the Maasai](#), The Oakland Institute and [World Rainforest Movement](#), 2019.
- Sandbrook, C., Fisher, J.A., Holmes, G. et al., [The global conservation movement is diverse but not divided](#). Nature Sustainability 2, 316–323, 2019.
- Tauli-Corpuz, V., [Report of the Special Rapporteur of the Human Rights Council on the rights of indigenous peoples](#), United Nations, 2016.

Listen:

- G. Blanc and J. Gacon, [Parcs nationaux en Afrique : comment protéger sans exproprier ?](#), France Culture, 2022 (in French).

Selection of past articles on hungerexplained.org related to the topic:

- [Water resources: water stress and pollution](#), 2022.
- [The real cost of food - Can the market alone guide our food systems towards more sustainability?](#) 2020.
- [Life plagued by human madness: we must change our paradigms, objectives and values](#), 2019.
- [The global food crunch: myth or reality?](#) 2018.
- [Land degradation: a serious consequence of human activities with dramatic implications on food, health and well-being of the world population](#), 2018.
- [Forests: rural communities caught between markets and the objective of conserving the planet](#), 2013.