



Biodiversity- related jobs

The fallout from the COVID-19 pandemic has led not just to a slump in a wide range of economic sectors but to a drastic decline in relevant full-time and part-time employment (ILO, 2021). At the same time, overexploitation of plant and animal species, environmental pollution, species extinction, ecosystem loss and degradation and, not least, climate change are continuing unabated. A nature-positive recovery and the associated promotion of 'green' jobs can significantly and holistically contribute to overcoming such crises.

Can a nature-positive recovery create new jobs?

'Green' jobs support or implement environmental aspects and standards within existing or new sectors (Private Business Action for Biodiversity, GIZ, 2021a).

Biodiversity-friendly jobs are either aimed explicitly at preserving biodiversity (i.e., experts on nature conservation, its administration, and habitat and species restoration and protection) or have significant positive impacts on biodiversity by protecting it indirectly and managing it sustainably (i.e., biodiversity management in agriculture and forestry) (EU DG Environment, 2012). Relevant jobs are found in areas such as the circular economy and the application and expansion of [nature-based solutions](#) (ILO and WWF, 2020).

However, there is no official definition of biodiversity-related jobs yet.

Nature conservation promotes economic development (i.e., through the tourism and recreation industry, drinking water supply and crisis management), and investment in biodiversity conservation offers a range of short-term and long-term employment opportunities. However, biodiversity-friendly and 'green' jobs have so far not been adequately addressed in the global debate.

Responding to the loss of income and jobs caused by COVID-19 requires public and private investment. Unfortunately, much of the investment in 'recovery measures' is being channelled into productive sectors that disregard incentives for sustainability (i.e., extended subsidies for vehicles that run on fossil fuels or the relaxation of land use restrictions and their enforcement) (Vivid Economics & Finance for Biodiversity Initiative, 2020).

Such investments – alongside existing environmentally harmful subsidies – place a strain on the national budget not only in the form of additional expenditure but also through the increased long-term costs incurred for repairing the damage they inflict on the environment, nature and public health (German Federal Environment Agency, 2016). The loss of ocean biodiversity alone, such as overfishing and nutrient contamination, causes economic losses of at least USD 200 billion per year (UNDP and GEF, 2012).

In contrast, a transformation towards a nature-positive economy would create economic development opportunities and significant employment effects without the disadvantages of conventional economic stimulus programmes. The costs of environmental degradation could be avoided, and economic prospects would emerge from using new environmental technologies, such as innovations in sustainable management of natural resources and environmentally friendly business models.

Biodiversity conservation and the sustainable use of biological resources also offer a range of opportunities for private-sector enterprises to tap into new markets. A study has demonstrated that many consumers are calling for biodiversity-friendly supply chains and products (Union for Ethical Biobusiness, 2020). It is therefore becoming increasingly important for the private sector to be aware of this trend.



In order to implement effective nature-positive recovery measures, these must generate employment growth quickly and efficiently (Hepburn et al., 2020). There are, in fact, already numerous examples demonstrating that, in the short and medium term, nature-positive recovery measures can help people – particularly those in the informal sector in developing countries – find regular employment by creating biodiversity-friendly jobs.

In Europe, the Natura 2000 Network (a coordinated network of protected areas in the EU) promotes 4.4 million jobs, safe-guards ecosystem services and generates socio-economic value worth USD 226 to 339 billion every year (World Resources Institute, 2020). Biodiversity conservation is expected to create as many as 500,000 jobs connected to the Natura 2000 Network by 2050 (Institute for European Environmental Policy, 2017).

According to the Food and Agriculture Organization (FAO), every US dollar invested in the regeneration of degraded land generates an estimated economic benefit of between USD 7 and USD 30, including co-benefits such as better food production, carbon storage and improved water quality (FAO, 2018).

Biodiversity and employment promotion in Germany's international cooperation

The topic of 'green' jobs is increasingly relevant in Germany's international cooperation. GIZ is engaged in projects at local, regional, national and global level aimed at introducing 'green' jobs and a 'green economy' on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ) and the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV).



One example of indirect employment effects is the Private Business Action for Biodiversity (PBAB) project commissioned by BMUV. It supports small and medium-sized enterprises (SMEs) in implementing biodiversity-friendly practices along the value chain and promotes biodiversity-friendly production and marketing. This gives them better, secure market access and more stable prices. Training measures and instruments for implementation, such as biodiversity action plans and assessments, contribute significantly to more biodiversity-friendly production and hence to better ecosystem services. In India, three spice companies have incorporated these measures into their production methods. They have since sustainably managed some 3,000 ha of spice fields, enabling 9,600 people to directly benefit from the project measures (GIZ, 2021b).

Recommendations for a stronger focus on employment in biodiversity-relevant green recovery measures

Policymakers must ensure that the economic recovery after COVID-19 does not further jeopardise biological diversity but instead preserves and promotes it so that 'green' and biodiversity-related jobs can develop their full potential for a nature-positive economic development. In order to achieve this, investment in the conservation, sustainable management and restoration of biodiversity needs to be increased and its funding secured. Thus investments and subsidies that harm biodiversity must be eliminated and – ideally – transformed into ones that promote biodiversity. This also requires incentives for creating biodiversity-friendly production systems and rules and sanctions to be refined and put into place.

The public and private finance sector has already begun to recognise the importance of conserving biodiversity (GIZ, 2021a). In order to support this trend, the importance of biodiversity must be translated into the language of the finance sector by quantifying the monetary risks posed by biodiversity loss and the potential benefits to be derived from the valuation of biodiversity.

In particular, small and medium-sized enterprises have considerable potential to create jobs, and contribute to economic growth, especially at the local and regional level. That is why they should be the primary beneficiaries of innovation support. The following measures can achieve positive employment effects:

- Restoration of coastal ecosystems for long-term improvements to productivity and ecosystem-based adaptation contributes to preserving the livelihoods of coastal inhabitants (i.e., integrated mangrove planting and fishery systems, community-based and prevention-oriented, ecosystem-based fishery management, and the establishment of marine protected areas).
- Restoration of terrestrial ecosystems for increased sustainability and climate resilience of forestry and agriculture, and thus greater employment opportunities for agricultural workers and local low-income communities (i.e., forest landscape restoration – FLR, community-based ecosystem management, agroforestry).
- Sustainable management of natural resources, such as community-based forestry and ecotourism, especially in critical vulnerable ecosystems.

Even if the potential of 'green' jobs is significant, risks must also be named and investigated, for example, in connection with natural disasters and climate change. Therefore, prevention and containment strategies must be developed early to preserve and expand these jobs long-term.





Research and international debate must focus on finding ways to identify the indirect employment effects of biodiversity conservation more precisely and, on that basis, formulate an official definition of biodiversity-friendly jobs. Measurable targets and monitoring systems will be required to fully apply the 'do no harm' principle in future economic stimulus programmes (GIZ, 2021a). Furthermore, funding must be invested in research on monitoring, quantification and evaluation of the numerous co-benefits of biodiversity-friendly investments, particularly concerning their impact on socio-economic gains such as employment creation (ILO and WWF, 2020).

Sources

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CONTACT

IKI Support Project for the Design and Implementation of the New Global Biodiversity Framework (BioFrame)
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Friedrich-Ebert-Allee 32 + 36 • 53113 Bonn • Germany
bioframe@giz.de

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