### **Foreword**

Biodiversity underpins all life and provides vital benefits to our societies and economies. Yet despite this, pressures from land-use change, over-exploitation of natural resources, pollution and climate change are contributing to an alarming loss of living diversity. Since 1970 one tenth of the world's terrestrial biodiversity and one third of freshwater biodiversity have been wiped out. We are on course to lose another 10% of terrestrial species by 2050.

We have to reverse these trends. Biodiversity and ecosystem services provide invaluable – but often invisible – benefits at global, regional and local scales. These include services such as nutrient cycling, habitat provisioning, pollination, erosion control and climate regulation. The need to mainstream biodiversity and ecosystem services more effectively into national and sectoral policies has recently gained renewed impetus on the global policy agenda. In line with the Convention on Biological Diversity and the 2011-2020 Aichi Biodiversity Targets, the 2030 Agenda for Sustainable Development places strong emphasis on biodiversity for achieving these objectives.

The purpose of *Mainstreaming Biodiversity for Sustainable Development* is to highlight examples of good practice and remaining challenges in four key areas. These areas are: mainstreaming biodiversity at the national level; mainstreaming biodiversity in the agriculture, forestry and fisheries sectors; biodiversity mainstreaming in development co-operation; and monitoring and evaluating biodiversity mainstreaming.

Insights are drawn from 16 predominantly megadiverse countries (or those with biodiversity hotspots) as these countries host some of the richest and often most threatened biodiversity in the world. The countries examined also span the full range of income groups, from high-income economies such as Australia and France to lower-income economies such as Ethiopia and Madagascar.

Effectively mainstreaming biodiversity into all levels of government and society can lead to long-term and sustainable development outcomes and enhance the resilience of the ecosystems upon which we depend. The sharing of good practice insights and the identification of remaining challenges can help catalyse learning and foster change.

The report is intended for biodiversity policymakers and practitioners in developed and developing countries, as well as for development co-operation agencies and other national ministries. We hope this study will be of use as together we strive to develop better, more mainstreamed, biodiversity policies for better lives.

Angel Gurría

Secretary-General, OECD

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The publication has been written by Katia Karousakis and Megha Sud (OECD Environment Directorate), and Galina Alova and Naeeda Crishna Morgado (OECD Development Co-operation Directorate). Bérénice Lasfargues (OECD) prepared an early draft of Chapter 5. The authors would also like to gratefully acknowledge comments received from the OECD Secretariat, namely Simon Buckle (ENV/CBW); Jan Corfee-Morlot (formerly DCD/GPP); Dimitris Diakosavvas, Julien Hardelin, Roger Martini, Claire Delpeuch, James Innes, Barbara Hutniczak (TAD/NRP); Myriam Linster, Ivan Hascic (ENV/EPI); Ziga Zarnic (ENV/GGGR); and Ronnie Downes (GOV/BUD); as well as comments received from Tim Scott (UNDP BIOFIN), and Juha Siikamäki and Tom Brooks (IUCN). Anna Rourke and Jane Kynaston (ENV/CBW) provided administrative support.

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on sector experts and statisticians from the national statistics office. The process should be embedded in the elaboration and monitoring of national/subnational development policy and planning and/or sectoral strategy processes. It should be informed by quality criteria and respond to the need to capture progress and change resulting from the implementation of priority initiatives contained in national plans and sector strategies, as funded by public- and private-sector funds. Indicator formulation could be preceded and informed by a commissioned study that offers a range of poverty-environment indicators, complete with definitions, purpose, institutional roles and responsibilities, and data collection protocols. Another useful input is sector or thematic indicators proposed under other national and/or global initiatives. For instance, national climate change adaptation and mitigation strategies, NBSAPs and green economy strategies have formulated specific indicators that could be considered

- **Select a core set of indicators.** Through a consultative process with policy makers from the ministries of planning and key sectors and the national statistics office, practitioners should facilitate a process in which a core set of indicators is selected from among the possible poverty-environment indicators identified in the preceding step. Keep the number of proposed new indicators realistic, as the national statistics office will raise justified concerns related to the costs of data collection, the feasibility of regular data collection and how the data will be used for reporting.
- **Continuous review and refinement.** The adoption and application of povertyenvironment indicators can take five to ten years, owing to the cyclic planning and monitoring process. National development policies and plans and sector strategies are normally subject to five-year review and formulation cycles, and national monitoring systems are linked to these. Experience shows that an indicator can be adopted in the national monitoring system but no data be collected on it over time, either because of a lack of institutional ownership to put data collection systems in place or because it has been determined that data collection is not technically or economically feasible. Consequently, the effectiveness of proposed indicators should be reviewed periodically and indicators dropped or refined accordingly.

#### **Notes**

- 1. M&E can also address the development and validation of the theory of change underpinning mainstreaming interventions. Theory of change is a specific type of methodology for planning, participation and evaluation that is used in the philanthropy, not-for-profit and government sectors to promote social change.
- 2. The terms "biodiversity" and "development" are not always clearly defined, or defined differently for different programmes, making it difficult to compare and assess performance (Davies et al., 2013).
- 3. Contextual factors are a source of inputs and constraints to inputs, processes, outputs, outcomes and impacts; conversely, inputs, processes, outputs, outcomes and impacts feed into the context. Examples of contextual factors include political leadership and stability, and macroeconomic and fiscal policies (Thomas, 2014).
- 4. Huntley and Redford (2014) classify mainstreaming indicators in seven categories: spatial, government, private sector, individual-based, multilateral donor, poverty alleviation and markets for ecosystem services.
- 5. According to Scheerens et al. (2011), indicator data should also be sufficiently granular or disaggregated so as to allow for better adjustments and valid causal inferences.
- 6. Aichi Target 2 states: "By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems".
- 7. Aichi Target 3 is to encourage positive incentives and to reform incentives, including subsidies, that are harmful to biodiversity.
- 8. These are: Target 1: Biodiversity barometer; Target 3: Trends in potentially harmful elements of government support to agriculture; number of countries with biodiversity-relevant taxes; number of countries with biodiversity-relevant fees and charges; number of countries with biodiversity-relevant tradable permit schemes; Target 4: ecological footprint and Red List Index.
- 9. Ireland has also defined indicators for measures that mainstream biodiversity and use the green, yellow, red traffic light signal to indicate the level of progress. For more information see: http://indicators.biodiversityireland.ie/index.php?qt=fa&id=5.

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## Mainstreaming Biodiversity for Sustainable Development

The need to mainstream biodiversity into economic growth and development is being increasingly recognised and is now also firmly embedded in the Sustainable Development Goals. Drawing on experiences and insights from 16 predominantly megadiverse countries, this report examines how biodiversity is being mainstreamed in four key areas: 1) at the national level, including national development plans and other strategies, institutional co-ordination and national budgets; 2) the agriculture, forestry and fisheries sectors; 3) in development co-operation; and 4) the monitoring and evaluation of biodiversity mainstreaming and how this could be improved.

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