

International Nature Learning Package

Recommended reading list

Session one: Our relationship with nature **Essential study materials**

The Economics of Biodiversity: The Dasgupta Review – Headline Messages

Dasgupta, P. (2021). The Economics of Biodiversity: The Dasgupta Review. (London: HM Treasury). Headline messages, pages 1-6: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/9 57629/Dasgupta Review - Headline Messages.pdf

Understanding the value and limits of nature-based solutions to climate change and other global challenges

Seddon, N., Chausson, A., Berry, P., Girardin, C.A.J., Smith, A. & Turner, B. (2020). Understanding the value and limits of nature-based solutions to climate change and other global challenges. Philosophical Transactions of the Royal Society B, 375.1794, https://doi.org/10.1098/rstb.2019.0120, Abstract and Section 1.

The Role of the Natural Environment in Adaptation

Kapos, V., Wicander, S., Salvaterra, T., Dawkins, K., Hicks, C. (2019). The Role of the Natural Environment in Adaptation. Background Paper for the Global Commission on Adaptation. Rotterdam and Washington, D.C.: Global Commission on Adaptation. https://gca.org/reports/therole-of-the-natural-environment-in-adaptation/ Pages 1-7

Learning from 20 years of Payments for Ecosystem Services in Costa Rica

Porras, I., Barton, D.N, Miranda, M. and Chacón-Cascante, A. (2013). Learning from 20 years of Payments for Ecosystem Services in Costa Rica. International Institute for Environment and Development, London. https://pubs.iied.org/sites/default/files/pdfs/migrate/16514IIED.pdf, pages 62-66

Online study materials Written sources

Mapping the effectiveness of nature-based solutions for climate change adaptation

Chausson, A, Turner, B, Seddon, D, et al. (2020). Mapping the effectiveness of Nature-based Solutions for climate change adaptation. Global Change Biology, 26, pp. 6134–6155. https://doi.org/10.1111/gcb.15310



Getting the message right on nature-based solutions

Nature-Based Solutions Initiative. (2021). Getting the message right on nature-based solutions. News Item. https://www.naturebasedsolutionsinitiative.org/news/new-paper-getting-themessage-right-on-nature-based-solutions/

Biodiversity loss, development crisis?

Roe, D., Seddon, N. & Elliot, J. (2019). Biodiversity loss, development crisis? Briefing. IIED. https://www.naturebasedsolutionsinitiative.org/wp-content/uploads/2019/04/17705IIED.pdf

Global recognition of the importance of nature-based solutions to the impacts of climate change

Seddon, N., Daniels, E., Davis, R., Chausson, A., Harris, R., Hou-Jones, X. et al. (2020). Global recognition of the importance of nature-based solutions to the impacts of climate change. Global Sustainability, 3, E15. doi:10.1017/sus.2020.8

Videos

The Economics of nature: introducing the Dasgupta Review | The Royal Society

The Royal Society (2021). The economics of Biodiversity: the Dasgupta *Review.* https://www.youtube.com/watch?v=e2QDOeKH0DE Video featuring the Prince of Wales, Sir David Attenborough, Professor Sir Partha Dasgupta and Sir Venki Ramakrishnan to mark the publication of The economics of Biodiversity: the Dasgupta Review.

David Attenborough: A Life on Our Planet

Attenborough, David. (2020). A life on our planet. WWF. Available on Netflix.

What are nature-based solutions to climate change?

Nature-Based Solutions Initiative. (2018). What are nature-based solutions to climate change? 5 minute video: https://www.youtube.com/watch?v=9Yq2OPJR-a4&t=296s



Session two: The dynamics of deforestation: drivers, nature, interventions and challenges **Essential study materials**

Deforestation Fronts: Drivers and Responses in a Changing World

Pacheco, P., Mo, K., Dudley, N., Shapiro, A., Aguilar-Amuchastegui, N., Ling, P.Y., Anderson, C. and Marx, A. (2021). Deforestation fronts: Drivers and responses in a changing world. WWF, Gland. Switzerland.

https://www.tropicalforestalliance.org/assets/Uploads/deforestation fronts drivers and responses in a changing world full report 1 compressed.pdf, Pages 46-64

How to build deforestation-free supply chains: lessons from Indonesia

Tropical Forest Alliance. How to build deforestation free supply chains: Lessons from Indonesia. https://www.weforum.org/agenda/2020/03/how-to-build-deforestation-free-supplychains-lessons-from-indonesia/

Ten golden rules for reforestation to optimize carbon sequestration, biodiversity recovery and livelihood benefits

Di Sacco, A., et al. (2021), Ten golden rules for reforestation to optimize carbon sequestration, biodiversity recovery and livelihood benefits. Global Change Biology, 27, pp. 1328-1348. https://doi.org/10.1111/gcb.15498, Section 1.

Prosperous Forests

Food and Land Use Coalitoon.

(2019). Prosperous Forests.London: Systemiq. https://www.foodandlandusecoalition.org/wpcontent/uploads/2019/11/FOLU-Prosperous-Forests v6.pdfPages 2-5

Optional study materials

The relationship between forests and freshwater fish consumption in rural Nigeria

Lo M, Narulita S, Ickowitz A. (2019). The relationship between forests and freshwater fish consumption in rural Nigeria. PLOS ONE 14(6): e0218038. https://doi.org/10.1371/journal.pone.0218038

Benefit Accounting of Nature-Based Solutions for Watersheds

Brill, Gregg, Tien Shiao, Cora Kammeyer, Sarah Diringer, Kari Vigerstol, Naabia Ofosu-Amaah, Michael Matosich, Carla Müller-Zantop, Wendy Larson and Tim Dekker (2021). Benefit Accounting of Nature-Based Solutions for Watersheds: Guide United Nations CEO Water Mandate and Pacific Institute. Oakland, California. https://pacinst.org/wp-content/uploads/2021/03/Benefit-Accounting-of-Nature-Based-Solutions-for-Watershed-Guide-Pacific-Institute-March-2021.pdf



Forest resources are at the heart of the EU's bioeconomy strategy. How can they be used sustainably?

Johnson, F.X. & Bessonova, E. (2021). Forest resources are at the heart of the EU's bioeconomy strategy. How can they be used sustainably? Stockholm Environment Institute. Perspective, https://www.sei.org/perspectives/forests-eu-bioeconomy/

Impacts of large-scale forest restoration on socioeconomic status and local livelihoods: what we know and do not know

Adams, C., Rodrigues, S.T., Calmon, M. and Kumar, C. (2016), Impacts of large-scale forest restoration on socioeconomic status and local livelihoods: what we know and do not know. Biotropica, 48: 731-744. https://doi.org/10.1111/btp.12385 (Not open access)

Pitfalls of Tree Planting Show Why We Need People-Centered Natural Climate Solutions

Fleischman, F. et al. (2020). Pitfalls of Tree Planting Show Why We Need People-Centered Natural Climate Solutions. BioScience, 70,11, pp. 947–950, https://doi.org/10.1093/biosci/biaa094

About Cities4Forests

World Resources Institute 'Cities for Forests' Initiative: https://www.wri.org/ourwork/project/cities4forests/about-cities4forests

The economic costs of planting, preserving, and managing the world's forests to mitigate climate change

Austin, K.G., Baker, J.S., Sohngen, B.L. et al. (2020). The economic costs of planting, preserving, and managing the world's forests to mitigate climate change. Nat Communication, 11, 5946, https://doi.org/10.1038/s41467-020-19578-z

Importance of Indigenous Peoples' lands for the conservation of Intact Forest Landscapes

Fa, J. E. et al., (2020). Importance of Indigenious Peoples' lands for the conservation of Intact Forest Landscapes. Front Ecol Environ, 18(3): 135-140, DOI:1002/fee.2148



Session three: Agriculture, ecosystems and sustainable land use Essential study materials

Agricultural diversification promotes multiple ecosystem services without compromising yield

Tamburini et al paper "Agricultural diversification promotes multiple ecosystem services without compromising yield" 2020, Science Advances, V 6, N 45, DOI: 10.1126/sciadv.aba1715

The use of Ecosystem-based Adaptation practices by smallholder farmers in Central America

Celia A. Harvey, M. Ruth Martínez-Rodríguez, José Mario Cárdenas', Jacques Avelino, Bruno Rapidel, Raffaele Vignola, Camila I. Donatti, Sergio Vilchez-Mendoza. (2017). The use of Ecosystem-based Adaptation practices by smallholder farmers in Central America. Agriculture, Ecosystems & Environment, 246, Pages 279-290, <u>https://doi.org/10.1016/j.agee.2017.04.018</u>

Common ground: restoring land health for sustainable agriculture

Larbodière, L., Davies, J., Schmidt, R., Magero, C., Vidal, Arroyo Schnell, A., Bucher, P., Maginnis, S., Cox, N., Hasinger, O., Abhilash, P.C., Conner, N., Westerberg, V., Costa, L. (2020). Common ground: restoring land health for sustainable agriculture. Gland, Switzerland: IUCN. <u>https://portals.iucn.org/library/node/49094</u>

Optional study materials

The superior effect of nature based solutions in land management for enhancing ecosystem services

Keesstra, S. et al. (2018). The superior effect of nature based solutions in land management for enhancing ecosystem services. Science of The Total Environment, 610–611, pp. 997-1009, <u>https://doi.org/10.1016/j.scitotenv.2017.08.077</u> (Not open access)

Trees for life: The ecosystem service contribution of trees to food production and livelihoods in the tropics

James Reed, Josh van Vianen, Samson Foli, Jessica Clendenning, Kevin Yang, Margaret MacDonald, Gillian Petrokofsky, Christine Padoch, Terry Sunderland. (2017). Trees for life: The ecosystem service contribution of trees to food production and livelihoods in the tropics. Forest Policy and Economics, 84, pp. 62-

71, https://www.sciencedirect.com/science/article/pii/S1389934117300345

IPBES Workshop on Biodiversity and Pandemics: Executive Summary

(2020). *IPBES Workshop on Biodiversity and Pandemics: Executive Summary.* Bonn, Germany: IPBES Secretariat. <u>https://ipbes.net/sites/default/files/2020-</u>



10/IPBES%20Pandemics%20Workshop%20Report%20Executive%20Summary%20Final.pdf Page s 5-9

Tracking, targeting, and conserving soil biodiversity

Carlos A. Guerra, C. A. et al. (2021). Tracking, targeting and conserving soil biodiversity. Science, 371, Issue 6526, pp. 239-241, DOI: 10.1126/science.abd7926. https://science.sciencemag.org/content/371/6526/239

Better Finance, Better Food: Investing in the new food and land use economy

Blended Finance Taskforce. Better Finance, Better Food: Investing in the new food and land use economy. London:

Systemiq. https://static1.squarespace.com/static/5acdc066c258b4bd2d15050b/t/5fbdf4a5145a8629 dc75f6e7/1606284641579/Better+Finance%2C+Better+Food+-

+Investing+in+the+new+food+and+land+use+economy.pdf Pages 4-8

Nature-Positive Recovery for People, Economy and Climate

Nature 4 Climate. (2020). Nature-Positive Recovery for People, Economy and Climate.



Session four: Oceans and marine ecosystems: challenges, drivers and solutions

Essential study materials

IED: These short videos are great resources to guickly get on board with three oceans issues: No hidden catch: why small-scale fisheries matter Fiscal policy tools: creating a sustainable future for ocean and people Governing the high seas: half of the planet that belongs to us all

Protecting the global ocean for biodiversity, food and climate

Campaign for Nature. Protecting the global ocean for biodiversity, food and climate.

Study in Nature: Protecting the Ocean Delivers a Comprehensive Solution for Climate, **Fishing and Biodiversity**

Press release: https://www.campaignfornature.org/protecting-the-global-ocean-for-biodiversityfood-and-climate#fact

Full study: https://www.nature.com/articles/s41586-021-03371-z

Optional study materials

Integrating climate adaptation and biodiversity conservation in the global ocean

Tittensor, D.P. et al. (2019). Integrating climate adaptation and biodiversity conservation in the global ocean. Science Advances, 5.11, DOI: 10.1126/scia

Mangrove management for climate change adaptation and sustainable development in coastal zones

Jeffrey Chow (2018) Mangrove management for climate change adaptation and sustainable development in coastal zones, Journal of Sustainable Forestry, 37:2, 139-156, DOI: 10.1080/10549811.2017.1339615 (Not open access)

The IPBES Conceptual Framework — connecting nature and people

Diaz, S. et al. (2015). The IPBES Conceptual Framework- connecting nature and people. Current Opinion in Environmental Sustainability, vol 14, pp. 1-16, http://dx.doi.org/10.1016/j.cosust.2014.11.002 Box 2, page 8

The role of fish and fisheries in recovering from natural hazards: Lessons learned from Vanuatu



Eriksson, H. et al. (2017). The role of fish and fisheries in recovering from natural hazards: Lessons learned from Vanuatu. Environmental Science & Policy, 76, pp. 50-58, <u>https://doi.org/10.1016/j.envsci.2017.06.012</u> (Not open access)

Oceans 21

Oceans 21, a series of five ocean profiles including the Pacific and how they are being impacted by climate change and other stressors: <u>https://oceans21.netlify.app/</u>

Blue economy: how a handful of companies reap most of the benefits in multi-billion ocean industries

Virdin, J., Osterblom, H. & Jouffray, J-B. (2021). *Blue economy: how a handful of companies reap most of the benefits in multi-billion ocean industries.* The Conversation, <u>https://theconversation.com/blue-economy-how-a-handful-of-companies-reap-most-of-the-benefits-in-multi-billion-ocean-industries-153165</u>

Marine reserves can mitigate and promote adaptation to climate change

Roberts, C. M. et al. (2017). Marine reserves can mitigate and promote adaptation to climate change. <u>*Proceedings of the National Academy of Sciences*. 114 (24) 6167-6175; DOI: 10.1073/pnas.1701262114</u>



Session five: Increasing financial flows and the role of finance in sustaining nature **Essential study materials**

Chapter 6. Nature-based Solutions for Adaptation - Adaptation Gap Report 2020

Kapos, V., M. De Mel, C. Rosenzweig, M. Kolenda, L. Emerton, and H. Neufeldt, 2021: Chapter 6: Nature-based solutions for adaptation. In Adaptation Gap Report 2020. United Nations Environment Programme, pp. 43-76 https://wedocs.unep.org/handle/20.500.11822/34754

Final Report - The Economics of Biodiversity: The Dasgupta Review

Dasgupta, P. (2021), The Economics of Biodiversity: The Dasgupta Review. (London: HM Treasury). https://www.gov.uk/government/publications/final-report-the-economics-of-biodiversitythe-dasgupta-review

Mobilizing Private Finance for Nature

The World Bank. (2020). Mobilising private finance for nature. https://openknowledge.worldbank.org/handle/10986/35984

The Little Book of Investing in Nature

Tobin-de la Puente, J. and Mitchell, A.W. (eds.), 2021. The Little Book of Investing in Nature, Global Canopy: Oxford. https://globalcanopy.org/wp-content/uploads/2021/01/LBIN_2020_EN.pdf, pages 207-210

Optional study materials

Nature-based Solutions for Adaptation Are Underfunded — But Offer Big Benefits

Bapna, M. & Fuller, P. (2021). Nature-based Solutions for Adaptation are Underfunded- But Offer Big Benefits. World Resources Institute. https://www.wri.org/insights/nature-based-solutionsadaptation-are-underfunded-offer-big-benefits

Greening the Stimulus: investing in Nature

Vivid Economics. (2020). Greening the Stimulus: investing in Nature. https://www.vivideconomics.com/wp-content/uploads/2020/01/210119-Greening-thestimulus_clean.pdf

The Green Renaissance: How to Rebuild the Global Economy

The Green Renaissance Podcast: Episode 4 Financing a Nature-Positive Economy. https://pod.link/1523645789/episode/05e9704452e1b34f66fc6815fcaf7554



Scaling up finance mechanisms for biodiversity

OECD. (2011). Scaling up finance mechanisms for biodiversity. Paris: OECD. https://www.oecd.org/env/resources/OECD%20Finance%20for%20Biodiversity%20%5Bf% 5D%20%5Blr%5D%20WEB%20SM.pdf. Pages 4-11

How to Scale Up Investments in Nature

The Nature Conservancy (2018). How to scale up investments in nature. Speech by former CEO Mark Tercek. https://www.nature.org/en-us/about-us/who-we-are/our-people/mark-tercek/how-toscale-up-investments-in-nature/

Transitioning to a Nature-Positive Economy by 2030

RSPB (2021). Transitioning to a nature-positive economy by 2030: implementing the Dasgupta Review on the economics of biodiversity. https://www.rspb.org.uk/globalassets/downloads/documents/positions/transitioning-toa-nature-positive-economy.pdf

Nature to the Rescue: How nature-based solutions move corporate water risk management beyond BAU

Frank, A., Silber, T., & Lamb, C. (2018). Nature to the rescue: How Nature-based Solutions are moving corporate water risk management beyond business-as-usual. South Pole. https://www.southpole.com/publications/water-white-paper-2018