

PROF. DR. JOHAN ROCKSTRÖM

Scientific Publications



Top 10 peer-reviewed publications

- Rockström, Johan, Louis Kotzé, Svetlana Milutinović, Frank Biermann, Victor Brovkin, Jonathan Donges, Jonas Ebbesson, et al. 2024. **'The Planetary Commons: A New Paradigm for Safeguarding Earth-Regulating Systems in the Anthropocene'**. *Proceedings of the National Academy of Sciences* 121 (5): e2301531121. <https://doi.org/10.1073/pnas.2301531121>.
- Richardson, Katherine, Will Steffen, Wolfgang Lucht, Jørgen Bendtsen, Sarah E. Cornell, Jonathan F. Donges, Markus Drüke, et al. 2023. **'Earth beyond Six of Nine Planetary Boundaries'**. *Science Advances* 9 (37): eadh2458. <https://doi.org/10.1126/sciadv.adh2458>.
- Rockström, Johan, Joyeeta Gupta, Dahe Qin, Steven J. Lade, Jesse F. Abrams, Lauren S. Andersen, David I. Armstrong McKay, et al. 2023. **'Safe and Just Earth System Boundaries'**. *Nature* 619 (7968): 102–11. <https://doi.org/10.1038/s41586-023-06083-8>.
- Sureth, Michael, Matthias Kalkuhl, Ottmar Edenhofer, and Johan Rockström. 2023. **'A Welfare Economic Approach to Planetary Boundaries'**: *Jahrbücher Für Nationalökonomie Und Statistik*, March. <https://doi.org/10.1515/jbnst-2022-0022>.
- Armstrong McKay, David I., Arie Staal, Jesse F. Abrams, Ricarda Winkelmann, Boris Sakschewski, Sina Loriani, Ingo Fetzer, Sarah E. Cornell, Johan Rockström, and Timothy M. Lenton. 2022. **'Exceeding 1.5°C Global Warming Could Trigger Multiple Climate Tipping Points'**. *Science* 377 (6611). <https://doi.org/10.1126/science.abn7950>.
- Willett, Walter, Johan Rockström, Brent Loken, Marco Springmann, Tim Lang, Sonja Vermeulen, Tara Garnett, et al. 2019. **'Food in the Anthropocene: The EAT–Lancet Commission on Healthy Diets from Sustainable Food Systems'**. *The Lancet* 393 (10170): 447–92. [https://doi.org/10.1016/S0140-6736\(18\)31788-4](https://doi.org/10.1016/S0140-6736(18)31788-4).
- Steffen, Will, Johan Rockström, Katherine Richardson, Timothy M. Lenton, Carl Folke, Diana Liverman, Colin P. Summerhayes, et al. 2018. **'Trajectories of the Earth System in the**

Anthropocene. *Proceedings of the National Academy of Sciences of the United States of America* 115 (33): 8252–59. <https://doi.org/10.1073/pnas.1810141115>.

Rockström, Johan, Owen Gaffney, Joeri Rogelj, Malte Meinshausen, Nebojsa Nakicenovic, and Hans Joachim Schellnhuber. 2017. **'A Roadmap for Rapid Decarbonization'**. *Science* 355 (6331): 1269–71. <https://doi.org/10.1126/science.aah3443>.

Steffen, Will, Katherine Richardson, Johan Rockström, Sarah E. Cornell, Ingo Fetzer, Elena M. Bennett, Reinette Biggs, et al. 2015. **'Planetary Boundaries: Guiding Human Development on a Changing Planet'**. *Science* 347 (6223): 1259855. <https://doi.org/10.1126/science.1259855>.

Rockström, Johan, Will Steffen, Kevin Noone, Åsa Persson, F. Stuart Chapin, Eric F. Lambin, Timothy M. Lenton, et al. 2009. **'A Safe Operating Space for Humanity'**. *Nature* 461 (7263): 472–75. <https://doi.org/10.1038/461472a>.

Complete publication list

2024

Peer-reviewed journals

Bai, Xuemei, Syezlin Hasan, Lauren Seaby Andersen, Anders Bjørn, Şiir Kilkış, Daniel Ospina, Jianguo Liu, et al. 2024. **'Translating Earth System Boundaries for Cities and Businesses'**. *Nature Sustainability* 7 (2): 108–19. <https://doi.org/10.1038/s41893-023-01255-w>.

Fuso Nerini, Francesco, Mariana Mazzucato, Johan Rockström, Harro van Asselt, Jim W. Hall, Stelvia Matos, Åsa Persson, Benjamin Sovacool, Ricardo Vinuesa, and Jeffrey Sachs. 2024. **'Extending the Sustainable Development Goals to 2050 — a Road Map'**. *Nature* 630 (8017): 555–58. <https://doi.org/10.1038/d41586-024-01754-6>.

Gupta, Joyeeta, Xuemei Bai, Diana M. Liverman, Johan Rockström, Dahe Qin, Ben Stewart-Koster, Juan C. Rocha, et al. 2024. **'A Just World on a Safe Planet: A Lancet Planetary Health–Earth Commission Report on Earth-System Boundaries, Translations, and Transformations'**. *The Lancet Planetary Health*, September. [https://doi.org/10.1016/S2542-5196\(24\)00042-1](https://doi.org/10.1016/S2542-5196(24)00042-1).

Humpenöder, Florian, Alexander Popp, Leon Merfort, Gunnar Luderer, Isabelle Weindl, Benjamin Leon Bodirsky, Miodrag Stevanović, et al. 2024. **'Food Matters: Dietary Shifts Increase the Feasibility of 1.5°C Pathways in Line with the Paris Agreement'**. *Science Advances* 10 (13): eadj3832. <https://doi.org/10.1126/sciadv.adj3832>.

Lawrence, Michael, Thomas Homer-Dixon, Scott Janzwood, Johan Rockström, Ortwin Renn, and Jonathan F. Donges. 2024. **'Global Polycrisis: The Causal Mechanisms of Crisis Entanglement'**. *Global Sustainability* 7 (January): e6. <https://doi.org/10.1017/sus.2024.1>.

Möller, Tessa, Annika Ernest Högner, Carl-Friedrich Schleussner, Samuel Bien, Niklas H. Kitzmann, Robin D. Lamboll, Joeri Rogelj, Jonathan F. Donges, Johan Rockström, and Nico Wunderling. 2024. **'Achieving Net Zero Greenhouse Gas Emissions Critical to Limit Climate Tipping Risks'**. *Nature Communications* 15 (1): 6192. <https://doi.org/10.1038/s41467-024-49863-0>.

- Nyasulu, Maganizo Kruger, Ingo Fetzer, Lan Wang-Erlandsson, Fabian Stenzel, Dieter Gerten, Johan Rockström, and Malin Falkenmark. 2024. '**African Rainforest Moisture Contribution to Continental Agricultural Water Consumption**'. *Agricultural and Forest Meteorology* 346 (March):109867. <https://doi.org/10.1016/j.agrformet.2023.109867>.
- Orasche, Jürgen, Kari C. Nadeau, Antonia Schuster, Johan Rockström, Cezmi A. Akdis, and Claudia Traidl-Hoffmann. 2024. '**Climate Crisis Paralysis: Accelerating Global Action for Health Resilience in a Changing World**'. *Allergy* 79 (7): 1653–55. <https://doi.org/10.1111/all.16096>.
- Porkka, Miina, Vili Virkki, Lan Wang-Erlandsson, Dieter Gerten, Tom Gleeson, Chinchu Mohan, Ingo Fetzer, et al. 2024. '**Notable Shifts beyond Pre-Industrial Streamflow and Soil Moisture Conditions Transgress the Planetary Boundary for Freshwater Change**'. *Nature Water* 2 (3): 262–73. <https://doi.org/10.1038/s44221-024-00208-7>.
- Ripple, William J, Christopher Wolf, Jillian W Gregg, Johan Rockström, Michael E Mann, Naomi Oreskes, Timothy M Lenton, et al. 2024. '**The 2024 State of the Climate Report: Perilous Times on Planet Earth**'. *BioScience*, October, biae087. <https://doi.org/10.1093/biosci/biae087>.
- Rockström, Johan. 2024. '**Reflections on the Past and Future of Whole Earth System Science**'. *Global Sustainability* 7 (May):e32. <https://doi.org/10.1017/sus.2024.15>.
- Rockström, Johan, Jonathan F. Donges, Ingo Fetzer, Maria A. Martin, Lan Wang-Erlandsson, and Katherine Richardson. 2024. '**Planetary Boundaries Guide Humanity's Future on Earth**'. *Nature Reviews Earth & Environment* 5 (11): 773–88. <https://doi.org/10.1038/s43017-024-00597-z>.
- Rockström, Johan, Louis Kotzé, Svetlana Milutinović, Frank Biermann, Victor Brovkin, Jonathan Donges, Jonas Ebbesson, et al. 2024. '**The Planetary Commons: A New Paradigm for Safeguarding Earth-Regulating Systems in the Anthropocene**'. *Proceedings of the National Academy of Sciences* 121 (5): e2301531121. <https://doi.org/10.1073/pnas.2301531121>.
- Rockström, Johan, Lan Wang-Erlandsson, Carl Folke, Dieter Gerten, Line J. Gordon, and Patrick W. Keys. 2024. '**Malin Falkenmark: Water Pioneer Who Coined the Notion of Water Crowding and Coloured the Water Cycle**'. *Ambio* 53 (5): 657–63. <https://doi.org/10.1007/s13280-024-01989-7>.
- Rockström, Johan, Lila Warszawski, and Antonia Schuster. 2024. '**A Stable Planet Is a Prerequisite for Development: Sustainable or Otherwise**'. *Horizons: Journal of International Relations and Sustainable Development* 27 (September):36–48.
- Tobian, Arne, Dieter Gerten, Ingo Fetzer, Sibyll Schaphoff, Lauren Seaby Andersen, Sarah Cornell, and Johan Rockström. 2024. '**Climate Change Critically Affects the Status of the Land-System Change Planetary Boundary**'. *Environmental Research Letters* 19 (5): 054060. <https://doi.org/10.1088/1748-9326/ad40c2>.
- Whitmee, Sarah, Rosemary Green, Kristine Belesova, Syreen Hassan, Soledad Cuevas, Peninah Murage, Roberto Picetti, et al. 2024. '**Pathways to a Healthy Net-Zero Future: Report of the Lancet Pathfinder Commission**'. *The Lancet* 403 (10421): 67–110. [https://doi.org/10.1016/S0140-6736\(23\)02466-2](https://doi.org/10.1016/S0140-6736(23)02466-2).

Other

Caesar, Levke, Boris Sakschewski, Lauren Seaby Andersen, Tim Beringer, Johanna Braun, Donovan Dennis, Dieter Gerten, et al. 2024. **'Planetary Health Check Report 2024'**. Potsdam, Germany: Potsdam Institute for Climate Impact Research.

https://www.planetaryhealthcheck.org/storyblok-cdn/f/301438/x/a4efc3f6d5/planetaryhealthcheck2024_report.pdf.

Future Earth, The Earth League, and WCRP. 2024. **'10 New Insights in Climate Science 2024/2025'**. Stockholm: Future Earth, The Earth League, The World Climate Research Programme.

<https://doi.org/10.5281/ZENODO.13950098>.

GCEW. 2024. **'The Economics of Water: Valuing the Hydrological Cycle as a Global Common Good'**.

<https://economicsofwater.watercommission.org/>.

2023

Peer-reviewed journals

Anderies, John M., Wolfram Barfuss, Jonathan F. Donges, Ingo Fetzer, Jobst Heitzig, and Johan Rockström. 2023. **'A Modeling Framework for World-Earth System Resilience: Exploring Social Inequality and Earth System Tipping Points'**. *Environmental Research Letters* 18 (9): 095001.

<https://doi.org/10.1088/1748-9326/ace91d>.

Boonstra, Wiebren Johannes, Rakhyun E. Kim, Louis J. Kotzé, Michelle Lim, Paulo Magalhães, Brian J. Preston, Johan Rockström, and Prue Taylor. 2023. **'Earth Steward: Will Steffen's Contributions to Earth System Science, Governance and Law'**. *Ambio* 52 (6): 995–1003.

<https://doi.org/10.1007/s13280-023-01867-8>.

Bustamante, Mercedes, Joyashree Roy, Daniel Ospina, Ploy Achakulwisut, Anubha Aggarwal, Ana Bastos, Wendy Broadgate, et al. 2023. **'Ten New Insights in Climate Science 2023/2024'**. *Global Sustainability*, December, 1–58. <https://doi.org/10.1017/sus.2023.25>.

Folke, Carl, Johan Rockström, and Katherine Richardson. 2023. **'Obituary – Will Steffen, the Father of Earth System Science'**. *Global Sustainability* 6 (September):e19.

<https://doi.org/10.1017/sus.2023.16>.

Gupta, Joyeeta, Diana Liverman, Klaudia Prodani, Paulina Aldunce, Xuemei Bai, Wendy Broadgate, Daniel Ciobanu, et al. 2023. **'Earth System Justice Needed to Identify and Live within Earth System Boundaries'**. *Nature Sustainability*, March, 1–9. <https://doi.org/10.1038/s41893-023-01064-1>.

Obura, David O., Fabrice DeClerck, Peter H. Verburg, Joyeeta Gupta, Jesse F. Abrams, Xuemei Bai, Stuart Bunn, et al. 2023. **'Achieving a Nature- and People-Positive Future'**. *One Earth* 6 (2): 105–17. <https://doi.org/10.1016/j.oneear.2022.11.013>.

Piercy, Ellen, Willy Verstraete, Peter R. Ellis, Mason Banks, Johan Rockström, Pete Smith, Oliver C. Witard, et al. 2023. **'A Sustainable Waste-to-Protein System to Maximise Waste Resource Utilisation for Developing Food- and Feed-Grade Protein Solutions'**. *Green Chemistry* 25 (3): 808–32. <https://doi.org/10.1039/D2GC03095K>.

- Rammelt, Crelis F., Joyeeta Gupta, Diana Liverman, Joeri Scholtens, Daniel Ciobanu, Jesse F. Abrams, Xuemei Bai, et al. 2023. **'Impacts of Meeting Minimum Access on Critical Earth Systems amidst the Great Inequality'**. *Nature Sustainability* 6 (2): 212–21. <https://doi.org/10.1038/s41893-022-00995-5>.
- Richardson, Katherine, Will Steffen, Wolfgang Lucht, Jørgen Bendtsen, Sarah E. Cornell, Jonathan F. Donges, Markus Drüke, et al. 2023. **'Earth beyond Six of Nine Planetary Boundaries'**. *Science Advances* 9 (37): eadh2458. <https://doi.org/10.1126/sciadv.adh2458>.
- Ripple, William J, Christopher Wolf, Jillian W Gregg, Johan Rockström, Thomas M Newsome, Beverly E Law, Luiz Marques, et al. 2023. **'The 2023 State of the Climate Report: Entering Uncharted Territory'**. *BioScience* 73 (12): 841–50. <https://doi.org/10.1093/biosci/biad080>.
- Ripple, William J., Christopher Wolf, Timothy M. Lenton, Jillian W. Gregg, Susan M. Natali, Philip B. Duffy, Johan Rockström, and Hans Joachim Schellnhuber. 2023. **'Many Risky Feedback Loops Amplify the Need for Climate Action'**. *One Earth* 6 (2): 86–91. <https://doi.org/10.1016/j.oneear.2023.01.004>.
- Rockström, Johan, Joyeeta Gupta, Dahe Qin, Steven J. Lade, Jesse F. Abrams, Lauren S. Andersen, David I. Armstrong McKay, et al. 2023. **'Safe and Just Earth System Boundaries'**. *Nature* 619 (7968): 102–11. <https://doi.org/10.1038/s41586-023-06083-8>.
- Rockström, Johan, Mariana Mazzucato, Lauren Seaby Andersen, Simon Felix Fahrländer, and Dieter Gerten. 2023. **'Why We Need a New Economics of Water as a Common Good'**. *Nature* 615 (7954): 794–97. <https://doi.org/10.1038/d41586-023-00800-z>.
- Rockström, Johan, Albert V. Norström, Nathaniel Matthews, Reinette Biggs, Carl Folke, Ameil Harikishun, Saleemul Huq, Nisha Krishnan, Lila Warszawski, and Deon Nel. 2023. **'Shaping a Resilient Future in Response to COVID-19'**. *Nature Sustainability* 6 (8): 897–907. <https://doi.org/10.1038/s41893-023-01105-9>.
- Rockström, Johan, and Katherine Richardson. 2023. **'William Steffen (1947–2023)'**. *Science* 380 (6642): 245–245. <https://doi.org/10.1126/science.adh9882>.
- Schlosser, Peter, Johan Rockström, Clea Edwards, Paula Mirazo, Adrian Heilemann, Niklas H. Kitzmann, and Siri L. Krobjinski. 2023. **'Accelerating Transformations for a Just, Sustainable Future: 10 "Must Haves"'**. *Global Sustainability* 6 (September):e17. <https://doi.org/10.1017/sus.2023.14>.
- Stewart-Koster, Ben, Stuart E. Bunn, Pamela Green, Christopher Ndehedehe, Lauren S. Andersen, David I. Armstrong McKay, Xuemei Bai, et al. 2023. **'Living within the Safe and Just Earth System Boundaries for Blue Water'**. *Nature Sustainability*, November, 1–11. <https://doi.org/10.1038/s41893-023-01247-w>.
- Sureth, Michael, Matthias Kalkuhl, Ottmar Edenhofer, and Johan Rockström. 2023. **'A Welfare Economic Approach to Planetary Boundaries'**: *Jahrbücher Für Nationalökonomie Und Statistik*, March. <https://doi.org/10.1515/jbnst-2022-0022>.
- The EAT–Lancet 2.0 Commissioners and contributing authors. 2023. **'EAT–Lancet Commission 2.0: Securing a Just Transition to Healthy, Environmentally Sustainable Diets for All'**. *The Lancet* 402 (10399): 352–54. [https://doi.org/10.1016/S0140-6736\(23\)01290-4](https://doi.org/10.1016/S0140-6736(23)01290-4).

Wunderling, Nico, Ricarda Winkelmann, Johan Rockström, Sina Loriani, David I. Armstrong McKay, Paul D. L. Ritchie, Boris Sakschewski, and Jonathan F. Donges. 2023. '**Global Warming Overshoots Increase Risks of Climate Tipping Cascades in a Network Model**'. *Nature Climate Change* 13 (1): 75–82. <https://doi.org/10.1038/s41558-022-01545-9>.

Other

Breier, Jannes, Luana Schwarz, Jonathan F. Donges, Dieter Gerten, and Johan Rockström. 2023. '**Regenerative Agriculture for Food Security and Ecological Resilience: Illustrating Global Biophysical and Social Spreading Potentials**'. Potsdam Institute for Climate Impact Research. <https://doi.org/10.48485/PIK.2023.001>.

Future Earth, The Earth League, and WCRP. 2023. '**10 New Insights in Climate Science 2023/2024**'. Stockholm: Future Earth, The Earth League, World Climate Research Programme. <https://doi.org/10.5281/ZENODO.10034364>.

2022

Peer-reviewed journals

Armstrong McKay, David I., Arie Staal, Jesse F. Abrams, Ricarda Winkelmann, Boris Sakschewski, Sina Loriani, Ingo Fetzer, Sarah E. Cornell, Johan Rockström, and Timothy M. Lenton. 2022. '**Exceeding 1.5°C Global Warming Could Trigger Multiple Climate Tipping Points**'. *Science* 377 (6611). <https://doi.org/10.1126/science.abn7950>.

Bai, Xuemei, Anders Bjørn, Şiir Kilkış, Oscar Sabag Muñoz, Gail Whiteman, Holger Hoff, Lauren Seaby Andersen, and Johan Rockström. 2022. '**How to Stop Cities and Companies Causing Planetary Harm**'. *Nature* 609 (7927): 463–66. <https://doi.org/10.1038/d41586-022-02894-3>.

Kemp, Luke, Chi Xu, Joanna Depledge, Kristie L. Ebi, Goodwin Gibbins, Timothy A. Kohler, Johan Rockström, et al. 2022. '**Climate Endgame: Exploring Catastrophic Climate Change Scenarios**'. *Proceedings of the National Academy of Sciences* 119 (34): e2108146119. <https://doi.org/10.1073/pnas.2108146119>.

Martin, Maria A., Emmanuel A. Boakye, Emily Boyd, Wendy Broadgate, Mercedes Bustamante, Josep G. Canadell, Edward R. Carr, et al. 2022. '**Ten New Insights in Climate Science 2022**'. *Global Sustainability* 5 (November):e20. <https://doi.org/10.1017/sus.2022.17>.

Noon, Monica L., Allie Goldstein, Juan Carlos Ledezma, Patrick R. Roehrdanz, Susan C. Cook-Patton, Seth A. Spawn-Lee, Timothy Maxwell Wright, et al. 2022. '**Mapping the Irrecoverable Carbon in Earth's Ecosystems**'. *Nature Sustainability* 5 (1): 37–46. <https://doi.org/10.1038/s41893-021-00803-6>.

Österblom, Henrik, Carl Folke, Juan Rocha, Jan Bebbington, Robert Blasiak, Jean-Baptiste Jouffray, Elizabeth R. Selig, et al. 2022. '**Scientific Mobilization of Keystone Actors for Biosphere Stewardship**'. *Scientific Reports* 12 (1): 3802. <https://doi.org/10.1038/s41598-022-07023-8>.

Ripple, William J, Christopher Wolf, Jillian W Gregg, Kelly Levin, Johan Rockström, Thomas M Newsome, Matthew G Betts, et al. 2022. **'World Scientists' Warning of a Climate Emergency 2022'**. *BioScience* 72 (12): 1149–55. <https://doi.org/10.1093/biosci/biac083>.

Rockström, Johan. 2022. **'Speeding up State-of-the-Art Assessments on Global Sustainability: Introducing the Cambridge Sustainability Commissions'**. *Global Sustainability* 5 (March):e2. <https://doi.org/10.1017/sus.2022.1>.

Van Vuuren, Detlef P., Caroline Zimm, Sebastian Busch, Elmar Kriegler, Julia Leininger, Dirk Messner, Nebojsa Nakicenovic, et al. 2022. **'Defining a Sustainable Development Target Space for 2030 and 2050'**. *One Earth* 5 (2): 142–56. <https://doi.org/10.1016/j.oneear.2022.01.003>.

Wang-Erlandsson, Lan, Arne Tobian, Ruud J. van der Ent, Ingo Fetzer, Sofie te Wierik, Miina Porkka, Arie Staal, et al. 2022. **'A Planetary Boundary for Green Water'**. *Nature Reviews Earth & Environment* 3 (6): 380–92. <https://doi.org/10.1038/s43017-022-00287-8>.

Other

Conservation International. 2022. **'Exponential Roadmap for Natural Climate Solutions'**. Conservation International. conservation.org/roadmap.

Dixon-Decleve, Sandrine, Owen Gaffney, Jayati Ghosh, Jorgen Randers, Johan Rockström, and Per Espen Stoknes. 2022. *Earth for All: A Survival Guide for Humanity*. 1st ed. Gabriola Island: New Society Publishers, Limited.

Future Earth, The Earth League, and WCRP. 2022. **'10 New Insights in Climate Science 2022'**. Stockholm: Future Earth, The Earth League, World Climate Research Programme. <https://doi.org/10.5281/ZENODO.7228925>.

Homer-Dixon, Thomas, Ortwin Renn, Johan Rockström, Jonathan F. Donges, and Scott Janzwood. 2022. **'A Call for An International Research Program on the Risk of a Global Polycrisis'**. *Cascade Institute*, July. <https://doi.org/10.2139/ssrn.4058592>.

Rockström, Johan. 2022. **'Tipping Points and Feedback Loops'**. In *The Climate Book*, by Greta Thunberg, 32–40. Allen Lane.

2021

Peer-reviewed journals

Armstrong McKay, David I., Sarah E. Cornell, Katherine Richardson, and Johan Rockström. 2021. **'Resolving Ecological Feedbacks on the Ocean Carbon Sink in Earth System Models'**. *Earth System Dynamics* 12 (3): 797–818. <https://doi.org/10.5194/esd-12-797-2021>.

Collste, David, Sarah E. Cornell, Jorgen Randers, Johan Rockström, and Per Espen Stoknes. 2021. **'Human Well-Being in the Anthropocene: Limits to Growth'**. *Global Sustainability* 4:e30. <https://doi.org/10.1017/sus.2021.26>.

- Folke, Carl, Stephen Polasky, Johan Rockström, Victor Galaz, Frances Westley, Michèle Lamont, Marten Scheffer, et al. 2021. **'Our Future in the Anthropocene Biosphere'**. *Ambio* 50 (4): 834–69. <https://doi.org/10.1007/s13280-021-01544-8>.
- Herrero, Mario, Philip K Thornton, Daniel Mason-D'Croz, Jeda Palmer, Benjamin L Bodirsky, Prajal Pradhan, Christopher B Barrett, et al. 2021. **'Articulating the Effect of Food Systems Innovation on the Sustainable Development Goals'**. *The Lancet Planetary Health* 5 (1): e50–62. [https://doi.org/10.1016/S2542-5196\(20\)30277-1](https://doi.org/10.1016/S2542-5196(20)30277-1).
- Martin, Maria A, Olga Alcaraz Sendra, Ana Bastos, Nico Bauer, Christoph Bertram, Thorsten Blenckner, Kathryn Bowen, et al. 2021. **'Ten New Insights in Climate Science 2021: A Horizon Scan'**. *Global Sustainability* 4 (e25): 1–20. <https://doi.org/10.1017/sus.2021.25>.
- Pihl, Erik, Eva Alfredsson, Magnus Bengtsson, Kathryn J. Bowen, Vanesa Cástan Broto, Kuei Tien Chou, Helen Cleugh, et al. 2021. **'Ten New Insights in Climate Science 2020 – a Horizon Scan'**. *Global Sustainability* 4 (e5): 1–18. <https://doi.org/10.1017/sus.2021.2>.
- Porkka, Miina, Lan Wang-Erlandsson, Georgia Destouni, Annica M L Ekman, Johan Rockström, and Line J Gordon. 2021. **'Is Wetter Better? Exploring Agriculturally-Relevant Rainfall Characteristics over Four Decades in the Sahel'**. *Environmental Research Letters* 16 (3): 035002. <https://doi.org/10.1088/1748-9326/abdd57>.
- Rockström, Johan, Tim Beringer, David Hole, Bronson Griscom, Michael B. Mascia, Carl Folke, and Felix Creutzig. 2021. **'We Need Biosphere Stewardship That Protects Carbon Sinks and Builds Resilience'**. *Proceedings of the National Academy of Sciences* 118 (38): e2115218118. <https://doi.org/10.1073/pnas.2115218118>.
- Rockström, Johan, Joyeeta Gupta, Timothy M. Lenton, Dahe Qin, Steven J. Lade, Jesse F. Abrams, Lisa Jacobson, et al. 2021. **'Identifying a Safe and Just Corridor for People and the Planet'**. *Earth's Future* 9 (4): e2020EF001866. <https://doi.org/10.1029/2020EF001866>.
- Warszawski, Lila, Elmar Kriegler, Timothy M Lenton, Owen Gaffney, Daniela Jacob, Daniel Klingensfeld, Ryu Koide, et al. 2021. **'All Options, Not Silver Bullets, Needed to Limit Global Warming to 1.5 °C: A Scenario Appraisal'**. *Environmental Research Letters* 16 (6): 64037. <https://doi.org/10.1088/1748-9326/abfeec>.

Other

- Future Earth, The Earth League, and WCRP. 2021. **'10 New Insights in Climate Science 2020'**. Stockholm: Future Earth, The Earth League, World Climate Research Programme. <https://futureearth.org/wp-content/uploads/2021/01/10-new-insights-in-climate-science-2020-20210125a.pdf>.
- Future Earth, The Earth League, and WCRP. 2021. **'10 New Insights in Climate Science 2021'**. Stockholm: Future Earth, The Earth League, World Climate Research Programme. <https://doi.org/10.5281/ZENODO.5639538>
- Gaffney, Owen, Johan Rockström, and Greta Thunberg. 2021. *Breaking Boundaries: The Science behind Our Planet*. London München: DK.

2020

Peer-reviewed journals

- Gerten, Dieter, Vera Heck, Jonas Jägermeyr, Benjamin Leon Bodirsky, Ingo Fetzer, Mika Jalava, Matti Kummu, et al. 2020. **'Feeding Ten Billion People Is Possible within Four Terrestrial Planetary Boundaries'**. *Nature Sustainability* 3 (3): 200–208. <https://doi.org/10.1038/s41893-019-0465-1>.
- Gleeson, Tom, Lan Wang-Erlandsson, Miina Porkka, Samuel C. Zipper, Fernando Jaramillo, Dieter Gerten, Ingo Fetzer, et al. 2020. **'Illuminating Water Cycle Modifications and Earth System Resilience in the Anthropocene'**. *Water Resources Research* 56 (4): e2019WR024957. <https://doi.org/10.1029/2019WR024957>.
- Gleeson, Tom, Lan Wang-Erlandsson, Samuel C. Zipper, Miina Porkka, Fernando Jaramillo, Dieter Gerten, Ingo Fetzer, et al. 2020. **'The Water Planetary Boundary: Interrogation and Revision'**. *One Earth* 2 (3): 223–34. <https://doi.org/10.1016/j.oneear.2020.02.009>.
- Goldstein, Allie, Will R. Turner, Seth A. Spawn, Kristina J. Anderson-Teixeira, Susan Cook-Patton, Joseph Fargione, Holly K. Gibbs, et al. 2020. **'Protecting Irrecoverable Carbon in Earth's Ecosystems'**. *Nature Climate Change* 10 (4): 287–95. <https://doi.org/10.1038/s41558-020-0738-8>.
- Herrero, Mario, Philip K. Thornton, Daniel Mason-D'Croz, Jeda Palmer, Tim G. Benton, Benjamin L. Bodirsky, Jessica R. Bogard, et al. 2020. **'Innovation Can Accelerate the Transition towards a Sustainable Food System'**. *Nature Food* 1 (5): 266–72. <https://doi.org/10.1038/s43016-020-0074-1>.
- Lade, Steven J., Will Steffen, Wim de Vries, Stephen R. Carpenter, Jonathan F. Donges, Dieter Gerten, Holger Hoff, Tim Newbold, Katherine Richardson, and Johan Rockström. 2020. **'Human Impacts on Planetary Boundaries Amplified by Earth System Interactions'**. *Nature Sustainability* 3 (2): 119–28. <https://doi.org/10.1038/s41893-019-0454-4>.
- Otto, Ilona M., Jonathan F. Donges, Roger Cremades, Avit Bhowmik, Richard J. Hewitt, Wolfgang Lucht, Johan Rockström, et al. 2020. **'Social Tipping Dynamics for Stabilizing Earth's Climate by 2050'**. *Proceedings of the National Academy of Sciences* 117 (5): 2354–65. <https://doi.org/10.1073/pnas.1900577117>.
- Rockström, Johan, Ottmar Edenhofer, Juliana Gaertner, and Fabrice DeClerck. 2020. **'Planet-Proofing the Global Food System'**. *Nature Food* 1 (1): 3–5. <https://doi.org/10.1038/s43016-019-0010-4>.
- Singh, Chandrakant, Lan Wang-Erlandsson, Ingo Fetzer, Johan Rockström, and Ruud Van Der Ent. 2020. **'Rootzone Storage Capacity Reveals Drought Coping Strategies along Rainforest-Savanna Transitions'**. *Environmental Research Letters* 15 (12): 124021. <https://doi.org/10.1088/1748-9326/abc377>.
- Staal, Arie, Ingo Fetzer, Lan Wang-Erlandsson, Joyce H. C. Bosmans, Stefan C. Dekker, Egbert H. Van Nes, Johan Rockström, and Obbe A. Tuinenburg. 2020. **'Hysteresis of Tropical Forests in the 21st Century'**. *Nature Communications* 11 (1): 4978. <https://doi.org/10.1038/s41467-020-18728-7>.
- Steffen, Will, Katherine Richardson, Johan Rockström, Hans Joachim Schellnhuber, Opha Pauline Dube, Sébastien Dutreuil, Timothy M Lenton, and Jane Lubchenco. 2020. **'The Emergence and**

Evolution of Earth System Science. *Nature Reviews Earth & Environment* 1 (January).
<https://doi.org/10.1038/s43017-019-0005-6>.

Vinke, Kira, Sabine Gabrysch, Emanuela Paoletti, Johan Rockström, and Hans Joachim Schellnhuber. 2020. **'Corona and the Climate: A Comparison of Two Emergencies'**. *Global Sustainability* 3:e25. <https://doi.org/10.1017/sus.2020.20>.

Other

Andersen, Lauren Seaby, Owen Gaffney, William Lamb, Holger Hoff, and Amanda Wood. 2020. **'A Safe Operating Space for New Zealand/Aotearoa: Translating the Planetary Boundaries Framework'**. Wellington, New Zealand: New Zealand Ministry for the Environment.
<https://www.mfe.govt.nz/publications/land-climate-change-fresh-water/safe-operating-space-new-zealandaotearoa-translating>.

Henry, Claude, Nicholas Stern, and Johan Rockström, eds. 2020. *Standing up for a Sustainable World: Voices of Change*. Cheltenham, UK and Northampton, MA, USA: Edward Elgar Publishing.

Mission Board for Adaptation to Climate Change, including Societal Transformation. 2020. *Proposed Mission: A Climate Resilient Europe: Prepare Europe for Climate Disruptions and Accelerate the Transformation to a Climate Resilient and Just Europe by 2030: Independent Expert Report*. Luxembourg: Publications Office of the European Union. <https://doi.org/10.2777/69766>.

Rockström, Johan. 2020. **'Introduction to Part VII'**. In *Standing up for a Sustainable World: Voices of Change*, 370–75. Cheltenham, UK and Northampton, MA, USA: Edward Elgar Publishing.

Rockström, Johan, Almut Beringer, Beatrice Crona, Owen Gaffney, and Daniel Klingefeld. 2020. **'Planetary Boundaries: A Compass for Investing for the Common Good'**. In *Sustainable Investing: A Path to a New Horizon*, by Herman Bril, Georg Kell, and Andreas Rasche, 109–28. London: Routledge.

Rockström, Johan, and Nicholas Stern. 2020. **'Science, Society and a Sustainable Future'**. In *Standing up for a Sustainable World: Voices of Change*, 3–9. Cheltenham, UK and Northampton, MA, USA: Edward Elgar Publishing.

Vidal, Alain, Steven J. Lade, Holger Hoff, and Johan Rockström. 2020. **'COVID-19: A Dashboard to Rebuild with Nature'**. Geneva, Switzerland: World Business Council for Sustainable Development. <https://www.wbcsd.org/resources/covid-19-a-dashboard-to-rebuild-with-nature/>.

2019

Peer-reviewed journals

Gleeson, T., Erlandsson, L. W., Zipper, S. C., Porkka, M., Jaramillo, F., Gerten, D., Fetzer, I., Cornell, S. E., Piemontese, L., Gordon, L. J., Rockström, J., Oki, T., Sivapalan, M., Wada, Y., Brauman, K. A., Flörke, M., Bierkens, M. F. P., Lehner, B., Keys, P., Kummu, M., Wagener, T., Dadson, S., Troy, T. J., Steffen, W., Falkenmark, M., Famiglietti, J. S. (2019). **The water planetary boundary: interrogation and revision**. *One Earth*, DOI: 10.31223/osf.io/swhma

Piemontese, L.; Fetzer, I.; Rockström, J.; Jaramillo, F. (2019). **Future hydroclimatic impacts on Africa: Beyond the Paris Agreement**. *Earth's Future*, 7, DOI: 10.1029/2019EF001169, 748-761

Lade, S. J.; Norberg, J.; Anderies, J. M.; Beer, C.; Cornell, S. E.; Donges, J. F.; Fetzer, I.; Gasser, T.; Richardson, K.; Rockström, J.; Steffen, W. (2019). **Potential feedbacks between loss of biosphere integrity and climate change**. *Global Sustainability*, 2, DOI: 10.1017/sus.2019.18

Lenton, T.M., Rockström, J., Gaffney, O., Rahmstorf, S., Richardson, K., Steffen, W., Schellnhuber, H.J. (2019). **Climate tipping points - too risky to bet against**. *Nature* Vol 575, pages 592-595. DOI: 10.1038/d41586-019-03595-0

Sachs, J. D., Schmidt-Traub, G., Mazzucato, M., Messner, D., Nakicenovic, N., Rockström, J. (2019). **Six Transformations to achieve the Sustainable Development Goals**. *Nature Sustainability* [DOI 10.1038/s41893-019-0352-9]

Willett, W., Rockström, J., Loken, B., Springmann, M., et.al. 2019. **Food in the Anthropocene: the EAT–Lancet Commission on healthy diets from sustainable food systems**. DOI: 10.1016/S0140-6736(18)31788-4

Falkenmark, M., Wang-Erlandsson, L., Rockström, J. 2019. **Understanding of Water Resilience in the Anthropocene**, *Journal of Hydrology X* 2, 100009. DOI: 10.1016/j.hydroa.2018.100009

Sterner, T., Barbier, E.B., Bateman, I., et. al. 2019. **Policy design for the Anthropocene**. *Nature Sustainability* Volume 2, pages 14–21

Other

Rockström, J. (2019). **Warum wir die globalen Emissionen halbieren müssen**. In: Füllkrug-Weitzel, C. (Hrsg.): *Klima geht uns alle an. Gedanken zur Lage der Schöpfung*, edition chrismon, Leipzig, 68-85.

Rockström, J., Wijkman, A., Dixon-Declève, S. 2019. **The Case for an EU Climate and Nature Czar**. Project Syndicate

Rockström, J., Bighnet, V., Landquist, M. Stordalen, G. 2019. **Eat Good – Das Kochbuch, das die Welt verändert**. Gertsenberg Verlag Hildesheim

Pihl, E., Martin, M.A., Blome, T., Hebden, S., Jarzebski, M.P., Lambino, R.A., Köhler, C., Canadell, J.G., Ebi, K.L., Edenhofer, O., Gaffney, O., Rockström, J., Roy, J., Srivastava, L., Payne, D.R., Adler, C., Watts, S., Jacobsson, L., Sonntag, S. (2019). **10 New Insights in Climate Science 2019**, *Future Earth & The Earth League*, Stockholm

2018

Randers, Jorgen, Johan Rockström, Per E. Stoknes, Ulrich Goluke, David Collste, and Sarah Cornell. 2018. "Achieving the 17 Sustainable Development Goals Within 9 Planetary Boundaries." EarthArXiv. October 16. doi:10.31223/osf.io/xwevb

ISI Publications

Springmann, M., Clark, M., Mason-D'Croz, D., Wiebe, K., Bodirsky, B.L., Lassaletta, L., de Vries, W., Vermeulen, S.J., Herrero, M., Carlson, K.M., Jonell, M., Troell, M., DeClerck, F., Gordon, L.J., Zurayk, R., Scarborough, P., Rayner, M., Loken, B., Fanzo, J., Godfray, H.C.J., Tilman, D., Rockström, J., Willett, W. 2018. Options for keeping the food system within environmental limits. *Nature* 562 (7728), pp. 519-525. DOI: 10.1038/s41586-018-0594-0.

Stoknes, P.E., Rockström, J. 2018. Redefining green growth within planetary boundaries. *Energy Research and Social Science* 44, pp. 41-49.

Steffen, W., J. Rockstrom, K. Richardson, T. M. Lenton, C. Folke, D. Liverman, C. P. Summerhayes, A. D. Barnosky, S. E. Cornell, M. Crucifix, J. F. Donges, I. Fetzer, S. J. Lade, M. Scheffer, R. Winkelmann, H. J. Schellnhuber. 2018. Trajectories of the Earth System in the Anthropocene. *Proceedings of the National Academy of Sciences of the United States of America* 115(33), pp. 8252-8259.

Pretty, J., Benton, T.G., Bharucha, Z.P., Dicks, L.V., Flora, C.B., Godfray, H.C.J., Goulson, D., Hartley, S., Lampkin, N., Morris, C., Pierzynski, G.k., Prasad, P.V.V., Reganold, J., Rockström, J., Smith, P., Thorne, P., Wratten, S. 2018. Global Assessment of Agricultural System Redesign for Sustainable Intensification. *Nature Sustainability* 1(8), pp. 441-446.

Caron, P., Ferrero y de Loma-Osorio, G., Nabarro, D., Hainzlin, E., Guillou, M., Andersen, I., Arnold, T., Astralaga, M., Beukeboom, M., Bickersteth, S., Bwalya, M., Caballero, P., Campbell, B.M., Divine, N., Fan, S., Frick, M., Friis, A., Gallagher, M., Halkin, J.-P., Hanson, C., Lasbennes, F., Ribera, T., Rockstrom, J., Schuepbach, M., Steer, A., Tutwiler, A., Verburg, G. 2018. Food systems for sustainable development: proposals for a profound four-part transformation. *Agronomy for Sustainable Development* 38(4), p. 41.

Lade, S.J., Donges, J.F., Fetzer, I., Anderies, J.M., Beer, C., Cornell, S.E., Gasser, T., Norberg, J., Richardson, K., Rockström, J., Steffen, W. 2018. Analytically tractable climate-carbon cycle feedbacks under 21st century anthropogenic forcing, *Earth System Dynamics* 9(2), pp. 507-523.

Rockstrom, J., K. Richardson, W. Steffen, G. Mace. 2018. Planetary Boundaries: Separating Fact from Fiction. A Response to Montoya et al., *Trends in Ecology & Evolution* 33 (4), pp. 232-233.

Landrigan, P.J., Fuller, R., Acosta, N.J.R., Adeyi, O., Arnold, R., Basu, N.N., Baldé, A.B., Bertollini, R., Bose-O'Reilly, S., Boufford, J., Breyse, P.N., Chiles, T., Mahidol, C., Coll-Seck, A.M., Cropper, M.L., Fobil, J., Fuster, V., Greenstone, M., Haines, A., Hanrahan, D., Hunter, D., Khare, M., Krupnick, A., Lanphear, B., Lohani, B., Martin, K., Mathiasen, K.V., McTeer, M.A., Murray, C.J.L., Ndahimananjara, J.D., Perera, F., Potočník, J., Preker, A.S., Ramesh, J., Rockström, J., Salinas, C., Samson, L.D., Sandilya, K., Sly, P.D., Smith, K.R., Steiner, A., Stewart, R.B., Suk, W.A., van Schayck, O.C.P., Yadama, G.N.,

Yumkella, K., Zhong, M. 2018. The Lancet Commission on pollution and health, *Lancet* 391 (10119), pp. 462-512.

Vanham, D., Hoekstra, A.Y., Wada, Y., Bouraoui, F., de Roo, A., Mekonnen, M.M., van de Bund, W.J., Batelaan, O., Pavelic, P., Bastiaanssen, W.G.M., Kummu, M., Rockström, J., Liu, J., Bisselink, B., Ronco, P., Pistocchi, A., Bidoglio, G. 2018. Physical water scarcity metrics for monitoring progress towards SDG target 6.4: an evaluation of indicator 6.4.2 "Level of water stress", *Science of the Total Environment* 613-614, pp. 218-232.

Non-ISI Publications

Rockström, Johan. (2018). Managing the global commons. *Our Planet*. 2017, pp. 26-27.

Rockström, Johan, Bai, Xuemei, deVries, Bert. 2018. Global sustainability: the challenge ahead. *Global Sustainability*.

2017

ISI Publications

Gordon, L.J., Bignet, V., Crona, B., Henriksson, P.J.G., Van Holt, T., Jonell, M., Lindahl, T., Troell, M., Barthel, S., Deutsch, L., Folke, C., Haider, L.J., Rockström, J., Queiroz, C. 2017. Rewiring food systems to enhance human health and biosphere stewardship. *Environ. Res. Lett.* 12, 100201

Österblom, H., Jouffray, J.-B., Folke, C., Rockström, J. 2017. Emergence of a global science-business initiative for ocean stewardship. *Proceedings of the National Academy of Sciences of the United States of America* 114(34), pp. 9038-9043.

Donges, J., Winkelmann, R., Cornell, S. E., Lucht, W., Dyke, J. G., Rockström, J., Heitzig, J., Schellnhuber, H.-J. 2017. Closing the loop: Reconnecting human dynamics to Earth system science. *Anthropocene Review* 4 (2), pp. 151-157.

Figueres, C., H.J. Schellnhuber, G. Whiteman, J. Rockström, A. Hobbey, S. Rahmstorf. 2017. Three years to safeguard our climate. *Nature* 546 (7660), pp. 593-595.

Rockström, J., Gaffney, O., Rogelj, J. et. al. 2017. A roadmap for rapid decarbonization. *Science* 355(6331), pp. 1269-1271.

Rockström, J., J. Williams, G. Daily, A. Noble, N. Matthews, L. Gordon, H. Wetterstrand, F. DeClerck, M. Shah, P. Steduto, C. de Fraiture, N. Hatibu, O. Unver, J. Bird, L. Sibanda, J. Smith. 2017. Sustainable intensification of agriculture for human prosperity and global sustainability. *Ambio* 46(1), pp. 4-17.

Clift, R., Sim, S., King, H., Chenoweth, J.L., Christie, I., Clavreul, J., Mueller, C., Posthuma, L., Boulay, A.-M., Chaplin-Kramer, R., Chatterton, J., DeClerck, F., Druckman, A., France, C., Franco, A., Gerten, D., Goedkoop, M., Hauschild, M.Z., Huijbregts, M.A.J., Koellner, T., Lambin, E.F., Lee, J., Mair, S., Marshall, S., McLachlan, M.S., Milà i Canals, L., Mitchell, C., Price, E., Rockström, J., Suckling, J.,

Murphy, R. 2017. The challenges of applying planetary boundaries as a basis for strategic decision-making in companies with global supply chains. *Sustainability (Switzerland)* 9 (2), article number 279.

Non-ISI Publications

Richardson, K., J. Rockström and W. Steffen. 2017. From local change comes a global tipping point, *New Scientist* 236 (3156), 52.

2016

ISI Publications

Dile, Y.T., Karlberg, L., Srinivasan, R., Rockström, J. 2016. Investigation of the curve number method for surface runoff estimation in tropical regions. *Journal of the American Water Resources Association* 52(5), pp. 1155-1169.

Rockström, J., Schellnhuber, H.J., Hoskins, B., Ramanathan, V., Schlosser, P., Brasseur, G.P., Gaffney, O., Nobre, C., Meinshausen, M., Rogerlj, J. and Lucht, W. 2016. The world's biggest gamble. *Earth's Future* 4(10), pp. 465–470.

Scharin, H., S. Ericsson, M. Elliott, R.K. Turner, S. Niiranen, T. Blenckner, K. Hyytiäinen, L. Ahlvik, H. Ahtiainen, J. Artell, L. Hasselström, T. Söderqvist, J. Rockström. 2016. Processes for the sustainable stewardship of marine environments. *Ecological Economics* 128: pp. 55 – 67.

Rockström, J., Stordalen, G.A., Horton, R. 2016. Acting in the Anthropocene: the EAT–Lancet Commission. *The Lancet* 387(10036), pp. 2364-2365.

Jagermeyr, J., D. Gerten, S. Schaphoff, J. Heinke, W. Lucht and J. Rockstrom. 2016. Integrated crop water management might sustainably halve the global food gap. *Environmental Research Letters* 11(2),025002.

Rockstrom, J. 2016. *Future Earth*. *Science* 351 (6271): 319.

Dile, Y.T., L. Karlberg, P. Daggupati, R. Srinivasan, D. Wiberg, J. Rockström. Assessing the implications of water harvesting intensification on upstream-downstream ecosystem services: A case study in the Lake Tana basin. *Science of the Total Environment* 542, pp. 22-35.

Dile, Y.T., Rockström, J., Karlberg, L., 2016. Suitability of Water Harvesting in the Upper Blue Nile Basin, Ethiopia: A First Step towards a Mesoscale Hydrological Modeling Framework. *Advances in Meteorology* 2016,5935430.

Folke, C., R. Biggs, A. V. Norström, B. Reyers, and J. Rockström. 2016. Social-ecological resilience and biosphere-based sustainability science. *Ecology and Society* 21(3):41.

Sutherland, W.J., S. Broad, J. Caine, M. Clout, L.V. Dicks, H. Doran, A.C. Entwistle, E. Fleishman, D.W. Gibbons, B. Keim, B. LeAnstey, F.A. Lickorish, P. Markillie, K.A. Monk, D. Mortimer, N. Ockendon, J.W. Pearce-Higgins, L.S. Peck, J. Pretty, J. Rockström, M.D. Spalding, F.H. Tonneijck, B.C. Wintle, K.E. Wright. 2016. A horizon scan of global conservation issues for 2016. *Trends in Ecology and Evolution* 31, pp. 44 – 53.

2015

ISI Publications

- Rockström, J. 2015. A 'perfect' agreement in Paris is not essential. *Nature* 527 (7579), 411.
- Demaio, A.R., J. Rockström. 2015. Human and planetary health: Towards a common language. *The Lancet* 386(10007), pp. e36–e37.
- Guerry, A.D., S. Polasky, J. Lubchenco, R. Chaplin-Kramer, G.C. Daily, R. Griffin, M. Ruckelshaus, I.J. Bateman, A. Duraiappah, T. Elmqvist, M.W. Feldman, C. Folke, J. Hoekstra, P.M. Kareiva, B.L. Keeler, S. Li, E. McKenzie, Z. Ouyang, B. Reyers, T.H. Ricketts, J. Rockström, H. Tallis, B. Vira. 2015. Natural capital and ecosystem services informing decisions: From promise to practice. *Proceedings of the National Academy of Sciences of the United States of America* 112(24), pp. 7348-73550.
- Gerten, D., J. Rockström, J. Heinke, W. Steffen, K. Richardson, S. Cornell. 2015. Response to comment on 'planetary boundaries: Guiding human development on a changing planet'. *Science* 348(6240): pp. 1217–d.
- Österblom, H., J.-B. Jouffray, C. Folke, B. Crona, M. Troell, A. Merrie, J. Rockström. 2015. Transnational corporations as 'keystone actors' in marine ecosystems. *PLoS ONE* 10(5): e0127533.
- Rockström, J., M. Falkenmark. 2015. Agriculture: Increase water harvesting in Africa. *Nature* 519: pp. 283–285.
- Steffen, W., K. Richardson, J. Rockström, S.E. Cornell, I. Fetzer, E.M. Bennett, R. Biggs, S.R. Carpenter, W. De Vries, C.A. De Wit, C. Folke, D. Gerten, J. Heinke, G.M. Mace, L.M. Persson, V. Ramanathan, B. Reyers, S. Sörlin. 2015. Planetary boundaries: Guiding human development on a changing planet. *Science* 347(6223), p. 1259855.
- Rockström, J., M. Klum. 2015. *Big World, Small Planet: Abundance within Planetary Boundaries*. Bokförlaget Max Ström, Stockholm.
- Hajer, M., M. Nilsson, K. Raworth, P. Bakker, F. Berkhout, Y. de Boer, J. Rockström, K. Ludwig, M. Kok. 2015. Beyond cockpit-ism: Four insights to enhance the transformative potential of the sustainable development goals. *Sustainability (Switzerland)* 7(2), pp. 1651-1660.
- Homer-Dixon, T., B. Walker, R. Biggs, A.-S. Crépin, C. Folke, E.F. Lambin, G.D. Peterson, J. Rockström, M. Scheffer, W. Steffen, M. Troell. 2015. Synchronous failure: The emerging causal architecture of global crisis. *Ecology and Society* 20(3), 6.
- Sutherland, W.J., M. Clout, M. Depledge, L.V. Dicks, J. Dinsdale, A.C. Entwistle, E. Fleishman, D.W. Gibbons, B. Keim, F.A. Lickorish, K.A. Monk, N. Ockendon, L.S. Peck, J. Pretty, J. Rockström, M.D. Spalding, F.H. Tonneijck, B.C. Wintle. 2015. A horizon scan of global conservation issues for 2015. *Trends in Ecology and Evolution* 30(1), pp. 17-24.

Non-ISI Publications

- Falkenmark, M., J. Rockström. 2015. Chapter 13: Double water blindness: Delaying Sub-Saharan green revolution. In: Clausen, A., T.J. Holmgren, K. Lexen (Eds.), *Water for Development: Charting a Water Wise Path*. SIWI, Stockholm, Sweden Vol. 35, pp. 64–69.
- Yu, X. and J. Rockstrom. 2015. Water Resilience for Human Prosperity, *Journal of the American Water Resources Association* 51 (2), pp. 581-582.

2014

ISI Publications

Rockström, J., M. Falkenmark, T. Allan, C. Folke, L. Gordon, A. Jägerskog, M. Kummu, M. Lannerstad, M. Meybeck, D. Molden, S. Postel, H. H. G. Savenije, U. Svedin, A. Turton, O. Varis. 2014. The unfolding water drama in the Anthropocene: Towards a resilience-based perspective on water for global sustainability. *Ecohydrology* 7(5), pp. 1249-1261.

Garg, K., S. Wani, J. Barron, L. Karlberg, J. Rockström. 2014. Reply to comment on 'Up-scaling potential impacts on water flows from agricultural water interventions: Opportunities and trade-offs in the Osman Sagar catchment, Musi sub-basin, India. *Hydrological Processes* 28(8), 3352-3355.

Rockström, J., Moberg, F. 2014. Obalans i globala miljöprocesser påverkar människors hälsa *Lakartidningen*. *Lakartidningen* 111(14)

Gerst, M.D.; Raskin, P.D.; Rockström, J. Contours of a Resilient Global Future. *Sustainability* 6(1), pp. 123-135.

Rockström, J., M. Falkenmark, C. Folke, M. Lannerstad, J. Barron, E. Enfors, L. Gordon, J. Heinke, H. Hoff, C. Pahl-Wostl. 2014. *Water Resilience for Human Prosperity*. Cambridge University Press.

Griggs, D., M. Stafford Smith, J. Rockström, M. C. Öhman, O. Gaffney, G. Glaser, N. Kanie, I. Noble, W. Steffen, and P. Shyamsundar. 2014. An integrated framework for sustainable development goals. *Ecology and Society* 19(4), 49.

Sutherland, W.J., R. Aveling, T.M. Brooks, M. Clout, L.V. Dicks, L. Fellman, E. Fleishman, D.W. Gibbons, B. Keim, F. Lickorish, K.A. Monk, D. Mortimer, L.S. Peck, J. Pretty, J. Rockström, J.P. Rodriguez, R.K. Smith, M.D. Spalding, F.H. Tonneijck, A.R. Watkinson. 2014. A horizon scan of global conservation issues for 2014. *Trends in Ecology & Evolution* 29(1), pp. 15-22.

Non-ISI Publications

Rockstrom, J., G. Brasseur, B. Hoskins, W. Lucht, J. Schellnhuber, P. Kabat, N. Nakicenovic, P. Gong, P. Schlosser, M. M. Costa, A. Humble, N. Eyre, P. Gleick, R. James, A. Lucena, O. Masera, M. Moench, R. Schaeffer, S. Seitzinger, S. van der Leeuw, B. Ward, N. Stern, J. Hurrell, L. Srivastava, J. Morgan, C. Nobre, Y. Sokona, R. Cremades, E. Roth, D. Liverman and J. Arnott. 2014. Climate change: The necessary, the possible and the desirable Earth League climate statement on the implications for climate policy from the 5th IPCC Assessment, *Earths Future* 2 (12), pp. 606-611.

Azar, C., G. Finnveden, K. Johannesson, O. Johansson-Stenman, A. Ledin, J. Munthe, A. E. Nilsson, A. Nordin, J. Rockström, H. Smith, S. Sörlin, A. Turesson, M. Vahter. 2014. *Miljöpolitikens spelplan: Rapport från Miljöforskningsberedningen*

Bennett, E.M., S.R. Carpenter, L.J. Gordon, N. Ramankutty, P. Balvanera, B. Campbell, W. Cramer, J. Foley, C. Folke, L. Karlberg, J. Liu, H. Lotze-Campen, N.D. Mueller, G.D. Peterson, S. Polasky, J. Rockström, R.J. Scholes, and M. Spirenborg. 2014. Toward a more resilient agriculture. *Solutions* 5 (5), pp.65-75.

2013

ISI Publications

Anderies, J.M., Carpenter, S.R., Steffen, W., Rockström, J. 2015. Erratum: The topology of non-linear global carbon dynamics: From tipping points to planetary boundaries (*Environmental Research Letters* (2013) 8 (044048)). *Environmental Research Letters* 10 (6), article number 069501.

- Garg, K. K., S. P. Wani, J. Barron, L. Karlberg and J. Rockstrom, 2013. Up-scaling potential impacts on water flows from agricultural water interventions: opportunities and trade-offs in the Osman Sagar catchment, Musi sub-basin, India, *Hydrological Processes* 27 (26), pp. 3905-3921.
- Hansen, J., P. Kharecha, M. Sato, V. Masson-Delmotte, F. Ackerman, D. J. Beerling, P. J. Hearty, O. Hoegh-Guldberg, S. L. Hsu, C. Parmesan, J. Rockstrom, E. J. Rohling, J. Sachs, P. Smith, K. Steffen, L. Van Susteren, K. von Schuckmann and J. C. Zochos. 2013. Assessing "Dangerous Climate Change": Required Reduction of Carbon Emissions to Protect Young People, Future Generations and Nature, *PLoS ONE* 8(12),e81648.
- Dile, Y. T., L. Karlberg, M. Temesgen and J. Rockstrom. 2013. The role of water harvesting to achieve sustainable agricultural intensification and resilience against water related shocks in sub-Saharan Africa, *Agriculture Ecosystems & Environment* 181, pp. 69-79.
- Pahl-Wostl, C., C. Vorosmarty, A. Bhaduri, J. Bogardi, J. Rockstrom and J. Alcamo. 2013. Towards a sustainable water future: shaping the next decade of global water research, *Current Opinion in Environmental Sustainability* 5 (6), pp. 708-714.
- Gerten, D., H. Hoff, J. Rockstrom, J. Jagermeyr, M. Kummu and A. V. Pastor. 2013. Towards a revised planetary boundary for consumptive freshwater use: role of environmental flow requirements, *Current Opinion in Environmental Sustainability* 5(6), pp. 551-558.
- Rockström, J., Steffen, W., Noone, K., Persson, Å., Chapin III, F.S., Lambin, E.F., Lenton, T.M., Scheffer, M., Folke, C., Joachim, H., Schnellhuber, Nykvist, B., de Wit, C.A., Hughes, T., van der Leeuw, S., Rodhe, H., Sörlin, S., Snyder, P.K., Costanza, R., Svedin, U., Falkenmark, M., Karlberg, L., Corell, R.W., Fabry, V.J., Hansen, J., Walker, B., Liverman, D., Richardson, K., Crutzen, P., Foley, J.K. 2013. A safe operating space for humanity. in *The Future of Nature: Documents of Global Change*. Yale University Press, pp. 491-501.
- Hughes, T. P., S. Carpenter, J. Rockstrom, M. Scheffer and B. Walker. 2013. Multiscale regime shifts and planetary boundaries, *Trends in Ecology & Evolution* 28 (7), pp. 389-395.
- Griggs, D., Stafford-Smith, M., Gaffney, O., Rockström, J., Öhman, M.C., Shyamsundar, P., Steffen, W., Glaser, G., Kanie, N., Noble, I. 2013. Policy: Sustainable development for people and planet. *Nature* 495 (7441), pp. 305-307.
- Liu, J. G., C. Folberth, H. Yang, J. Rockstrom, K. Abbaspour and A. J. B. Zehnder. 2013. A Global and Spatially Explicit Assessment of Climate Change Impacts on Crop Production and Consumptive Water Use. *PLoS ONE* 8(2),e57750.
- Rockström, J. 2013. Foreword. In: *The Economics of Climate Change in China: Towards a Low-Carbon Economy*, pp. xvii-xviii.
- Falkenmark, M., Rockström, J., 2013. Balancing water for humans and nature: The new approach in ecohydrology, *Balancing Water for Humans and Nature: The New Approach in Ecohydrology*. Taylor and Francis.
- Steffen, W., Rockström, J., Kubiszewski, I., Costanza, R. 2013. Planetary boundaries: Using early warning signals for sustainable global governance. *Globalisation, Economic Transition and the Environment: Forging a Path to Sustainable Development*. 259-275.
- Yang, H., Liu, J., Zehnder, A.J.B., Rockström, J. 2013. Ecosystem impacts of virtual water embodied in global trade of agricultural products. *Ecosystem Services and Global Trade of Natural Resources: Ecology, Economics and Policies*, pp. 106-119.
- de Fraiture, C., Wichelns, D., Rockström, J., Kemp-Benedict, E., Eriyagama, N., Gordon, L.J., Hanjra, M.A., Hoogeveen, J., Huber-Lee, A., Karlberg, L. 2013. Looking ahead to 2050: Scenarios of alternative

investment approaches. *Water for Food Water for Life: A Comprehensive Assessment of Water Management in Agriculture*, pp. 91-140.

Non-ISI Publications

Rockström, J., Sachs, J.D., Öhman, M.C., Schmidt-Traub, G. 2013. Sustainable Development and Planetary Boundaries. Background research paper the UN High-Level Panel of Eminent Persons on the Post-2015 Development Agenda.

Elmqvist, T., Cornell, S., Öhman, M.C., Daw, T., Moberg, F., Norström, A., Persson, Å., Peterson, G., Rockström, J., Schultz, M., Hermansson-Török, E. 2013. Global sustainability and Human prosperity – contribution to the Post-2015 agenda and the development of Sustainable Development Goals. TemaNord report (Nordic Council of Ministers).

Björn Nykvist, Åsa Persson, Fredrik Moberg, Linn Persson, Sarah Cornell, Johan Rockström. 2013. National Environmental Performance on Planetary Boundaries, The Swedish Environmental Protection Agency.

Schultz, M., Rockström, J., Öhman, M.C., Cornell, S., Persson, Å., Norström, A. 2013. Human prosperity requires global sustainability – a contribution to the post-2015 agenda and the development of Sustainable Development Goals. A Stockholm Resilience Centre Report to the Swedish Government Office.

2012

ISI Publications

Jonker, L., P. van der Zaag, B. Gumbo, J. Rockstrom, D. Love and H. H. G. Savenije. 2012. A regional and multi-faceted approach to postgraduate water education - the WaterNet experience in Southern Africa, *Hydrology and Earth System Sciences* 16 (11), pp. 4225-4232.

Rockström, J., Falkenmark, M., Lannerstad, M., Karlberg, L. 2012. The planetary water drama: Dual task of feeding humanity and curbing climate change, *Geophysical Research Letters* 39(15), L14403.

Garg, K.K., L. Karlberg, J. Barron, S.P. Wani and J. Rockström. 2012. Assessing impacts of agricultural water interventions in the Kothapally watershed, Southern India. *Hydrological Processes* 26(3), pp. 387-404.

Wani, S.P., Garg, K.K., Singh, A.K., Rockström, J. 2012. Sustainable management of scarce water resources in tropical rainfed agriculture. *Soil Water and Agronomic Productivity*, pp. 347-408.

Temesgen, M., H.H.G. Savenije, J. Rockström and W.B. Hoogmoed. 2011. Assessment of strip tillage systems for maize production in semi-arid Ethiopia: Effects on grain yield, water balance and water productivity. *Physics and Chemistry of the Earth* 47-48, pp. 156-165.

Walker, B. H., S. R. Carpenter, J. Rockstrom, A. S. Crepin and G. D. Peterson. 2012. Drivers, "Slow" Variables, "Fast" Variables, Shocks, and Resilience. *Ecology and Society* 17 (3).

Leach, M., J. Rockstrom, P. Raskin, I. Scoones, A. C. Stirling, A. Smith, J. Thompson, E. Millstone, A. Ely, E. Arond, C. Folke und P. Olsson. 2011. Transforming Innovation for Sustainability, *Ecology and Society* 17 (2).

Non-ISI Publications

Galaz, V., Cornell, S., Rockström, J., Persson, Å. 2012. Environment: Planetary boundaries concept is valuable. *Nature* 486, 191.

Dent, D.L., Batjes, N.H., Hartemink, A.E., Lynden, G.W.J. Van, Asfary, A.F., Giri, C., Govil, K., Holmgren, P., Keita-Ouane, F., Navone, S., Olsson, L., Ponce-Hernandez, R., Rockström, J., Shepher, G. 2012 . Land, Chapter 3. In: United Nations (ed.) *Global Environment Outlook 4 (GEO-4)- Environment for Development*, United Nations, pp. 81 – 114.

2011

ISI Publications

Persson, A., Rockström, J. 2011. Business leaders, *Nature Climate Change* 1 (9), pp. 426-427.

Steffen, W., A. Persson, L. Deutsch, J. Zalasiewicz, M. Williams, K. Richardson, C. Crumley, P. Crutzen, C. Folke, L. Gordon, M. Molina, V. Ramanathan, J. Rockstrom, M. Scheffer, H. J. Schellnhuber and U. Svedin. 2011. The Anthropocene: From Global Change to Planetary Stewardship, *Ambio* 40 (7), pp. 739-761.

Folke, C., A. Jansson, J. Rockstrom, P. Olsson, S. R. Carpenter, F. S. Chapin, G. Daily, K. Danell, J. Ebbesson, T. Elmqvist, V. Galaz, F. Moberg, M. Nilsson, H. Osterblom, E. Ostrom, A. Persson, G. Peterson, S. Polasky, W. Steffen, B. Walker and F. Westley. 2011. Reconnecting to the Biosphere, *Ambio* 40 (7), pp. 719-738.

Foley, J. A., N. Ramankutty, K. A. Brauman, E. S. Cassidy, J. S. Gerber, M. Johnston, N. D. Mueller, C. O'Connell, D. K. Ray, P. C. West, C. Balzer, E. M. Bennett, S. R. Carpenter, J. Hill, C. Monfreda, S. Polasky, J. Rockstrom, J. Sheehan, S. Siebert, D. Tilman and D. P. M. Zaks. 2011. Solutions for a cultivated planet, *Nature* 478 (7369), pp. 337-342.

Enfors, E., J. Barron, H. Makurira, J. Rockström and S. Tumbo. 2010. Yield and soil system changes from conservation tillage in dryland farming: A case study from North Eastern Tanzania. *Agricultural Water Management* 98 (11), pp. 1687-1695.

Makurira, H., H. H. G. Savenije, S. Uhlenbrook, J. Rockstrom and A. Senzanje. 2011. The effect of system innovations on water productivity in subsistence rainfed agricultural systems in semi-arid Tanzania. *Agricultural Water Management* 98 (11), pp. 1696-1703.

Andersson, J. C. M., A. J. B. Zehnder, J. Rockstrom and H. Yang. 2011. Potential impacts of water harvesting and ecological sanitation on crop yield, evaporation and river flow regimes in the Thukela River basin, South Africa, *Agricultural Water Management* 98 (7), pp. 1113-1124.

Falkenmark, M., Rockström, J. 2011. Back to basics on water as constraint for global food production: Opportunities and limitations *Water for Food in a Changing World*, pp. 103-116. (book)

Wani, S.P., J. Rockström and K.L. Sahrawat (eds.). 2011. *Integrated Watershed Management in Rainfed Agriculture*. CRC Press.

Rockström, J., L. Karlberg and M. Falkenmark (2011). Global food production in a water-constrained world: exploring 'green' and 'blue' challenges and solutions. In: R.Q. Grafton and K. Hussey (eds.) *Water resources planning and management*. Cambridge University Press, pp. 131-151.

Non-ISI Publications

Rockström, J., Schultz, M. 2011. Contributing to resilience. In Biodiversity and Ecosystem Insecurity. A Planet in Peril. Djoghla, A., Dodds, F. (eds.). Earthscan.

Anne-Sophie Crépin, Brian Walker, Stephen Polasky, Will Steffen, Victor Galaz, Carl Folke, and Johan Rockström. 2011. GLOBAL DYNAMICS, MULTIPLE SHOCKS, AND RESILIENCE. Planetary stewardship and catastrophic shifts in the Earth system Beijer Discussion paper 228.

Folke, C., and J. Rockström. 2011. Editorial - 3rd Nobel Laureate Symposium on Global Sustainability: Transforming the World in an Era of Global Change. *Ambio* 40, pp. 717-718.

Steffen, W., J. Rockström and R. Costanza (2011). How defining planetary boundaries can transform our approach to growth. *Solutions*, 2(3).

Schultz, M., Rockstrom, J., Ecosystem resilience, International Innovation, Bristol, UK, October 2011

Wani, S.P., Rockstrom, J., Venkateswarlu, B., Singh, A.K. 2012. New paradigm to unlock the potential of rainfed agriculture in the semiarid tropics. In: *World Soil Resources and Food Security*, pp. 419-469.

2010

ISI Publications

Reid, W. V., D. Chen, L. Goldfarb, H. Hackmann, Y. T. Lee, K. Mokhele, E. Ostrom, K. Raivio, J. Rockstrom, H. J. Schellnhuber and A. Whyte. 2010. Earth System Science for Global Sustainability: Grand Challenges, *Science* 330 (6006), pp. 916-917.

Falkenmark, M. and J. Rockstrom. 2010. Building Water Resilience in the Face of Global Change: From a Blue-Only to a Green-Blue Water Approach to Land-Water Management, *Journal of Water Resources Planning and Management* 136 (6), pp. 606-610.

Rockström, J. and L. Karlberg. 2010. The Quadruple Squeeze: Defining the safe operating space for freshwater use to achieve a triply green revolution in the Anthropocene, *Ambio* 39 (3), pp. 257-265.

Hoff, H., M. Falkenmark, D. Gerten, L. Gordon, L. Karlberg and J. Rockstrom. 2010. Greening the global water system, *Journal of Hydrology* 384, pp. 177-186.

Rockström, J., L. Karlberg, S. P. Wani, J. Barron, N. Hatibu, T. Oweis, A. Bruggeman, J. Farahani and Z. Qiang. 2010. Managing water in rainfed agriculture. The need for a paradigm shift, *Agricultural Water Management* 97 (4), pp. 543-550.

Folke, C., S. R. Carpenter, B. Walker, M. Scheffer, T. Chapin and J. Rockstrom. 2010. Resilience Thinking: Integrating Resilience, Adaptability and Transformability, *Ecology and Society* 15 (4).

Miller, F., H. Osbahr, E. Boyd, F. Thomalla, S. Bharwani, G. Ziervogel, B. Walker, J. Birkmann, S. van der Leeuw, J. Rockstrom, J. Hinkel, T. Downing, C. Folke and D. Nelson. 2010. Resilience and Vulnerability: Complementary or Conflicting Concepts?, *Ecology and Society* 15 (3).

Non-ISI Publications

Deutsch, L., Falkenmark, M., Gordon, L.J., Rockström, J., Folke, C. Water-mediated ecological consequences of intensive livestock production. Chapter in: *Livestock in a Changing Landscape: Drivers, Consequences and Responses*. H. Steinfeld, H. Mooney, F. Schneider (eds.). Livestock,

Environment and Development Initiative — LEAD at FAO, SCOPE program on Consequences of Industrialized Animal Production Systems, and the Swiss College of Agriculture.

Dile, Y., L. Karlberg and J. Rockström (2010). Identifying Suitable Areas for Water Harvesting in the Upper Blue Nile Basin, Ethiopia. 13th SearNET International Conference: Rainwater Harvesting as a means of Adaptation to the challenges of climate change, Awassa, Ethiopia, 12-16 July.

Rockström, J., K. Vohland, W. Lucht, H. Lotze-Campen, E.U. von Weizsäcker and T. Banuri (2010). Making progress within and beyond borders. In: H.J. Schellnhuber et al. (eds.) Global sustainability: a Nobel cause. Cambridge University Press. ISBN 9780521769341. Pp. 33-48.

2009

ISI Publications

Rockström, J., W. Steffen, K. Noone, A. Persson, F. S. Chapin, E. F. Lambin, T. M. Lenton, M. Scheffer, C. Folke, H. J. Schellnhuber, B. Nykvist, C. A. de Wit, T. Hughes, S. van der Leeuw, H. Rodhe, S. Sorlin, P. K. Snyder, R. Costanza, U. Svedin, M. Falkenmark, L. Karlberg, R. W. Corell, V. J. Fabry, J. Hansen, B. Walker, D. Liverman, K. Richardson, P. Crutzen and J. A. Foley. 2009. A safe operating space for humanity, *Nature* 461 (7263), pp. 472-475.

Rockström, J., M. Falkenmark, L. Karlberg, H. Hoff, S. Rost and D. Gerten. 2009. Future water availability for global food production: The potential of green water for increasing resilience to global change, *Water Resources Research* 45(7), W00A12.

Temesgen, M., W. B. Hoogmed, J. Rockstrom and H. H. G. Savenije. 2009. Conservation tillage implements and systems for smallholder farmers in semi-arid Ethiopia, *Soil & Tillage Research* 104 (1), pp. 185-191.

Hulme, M., M. Boykoff, J. Gupta, T. Heyd, J. Jaeger, D. Jamieson, M. C. Lemos, K. O'Brien, T. Roberts, J. Rockstrom and C. Vogel. 2009. Conference Covered Climate from All Angles, *Science* 324 (5929), pp. 881-882.

Rockstrom, J., P. Kaurnbutho, J. Mwalley, A. W. Nzabi, M. Temesgen, L. Mawenya, J. Barron, J. Mutua and S. Damgaard-Larsen. 2009. Conservation farming strategies in East and Southern Africa: Yields and rain water productivity from on-farm action research, *Soil & Tillage Research* 103 (1), pp. 23-32.

Folke, C. and J. Rockstrom. 2009. Turbulent times, *Global Environmental Change-Human and Policy Dimensions* 19 (1), pp. 1-3.

Makurira, H., H. H. G. Savenije, S. Uhlenbrook, J. Rockstrom and A. Senzanje. 2009. Investigating the water balance of on-farm techniques for improved crop productivity in rainfed systems: A case study of Makanya catchment, Tanzania, *Physics and Chemistry of the Earth* 34(1-2), pp. 93-98.

Rost, S., D. Gerten, H. Hoff, W. Lucht, M. Falkenmark and J. Rockstrom. 2009. Global potential to increase crop production through water management in rainfed agriculture, *Environmental Research Letters* 4(4), 044002.

Rockstrom, J., W. Steffen, K. Noone, A. Persson, F. S. Chapin, E. Lambin, T. M. Lenton, M. Scheffer, C. Folke, H. J. Schellnhuber, B. Nykvist, C. A. de Wit, T. Hughes, S. van der Leeuw, H. Rodhe, S. Sorlin, P. K. Snyder, R. Costanza, U. Svedin, M. Falkenmark, L. Karlberg, R. W. Corell, V. J. Fabry, J. Hansen, B. Walker, D. Liverman, K. Richardson, P. Crutzen and J. Foley. 2009. Planetary Boundaries: Exploring the Safe Operating Space for Humanity, *Ecology and Society* 14 (2).

Non-ISI Publications

de Fraiture, C., Karlberg, L., Rockström, J. (2009). Synthesis: How far can rain-fed agriculture go in securing food in 2025? In *Rainfed Agriculture – Unlocking the Potential*. S. Wani, J. Rockström, T. Oweis, T. (eds.). *Comprehensive Assessment of Water Management in Agriculture. Series Vol. 7*. CABI Publication, Wallingford, UK.

A report by Stockholm Resilience Centre produced for the Swedish Government's Commission on Sustainable Development, March 2009

Falkenmark, M., Rockström, J., Karlberg, L., (2009). Present and future water requirements for feeding humanity. *Food Security* 1: 59-69.

Karlberg, L., Rockström, J., (2009). Global freshwater resources. In *Fisheries, Sustainability and Development*. Royal Swedish Academy of Agriculture and Forestry. Stockholm, Sweden. pp 123-132.

Hoff, H., Falkenmark, M., Gerten, D., Gordon, L., Karlberg, L., Rockström, J. (2009). Greening the global water system. *Journal of Hydrology*.

Karlberg, L., Rockström, J., Falkenmark, M., 2009. Water resource implications of upgrading rainfed agriculture – focus on green and blue water trade-offs. In *Rainfed Agriculture – Unlocking the Potential*. S. Wani, J. Rockström, T. Oweis, T. (eds.). *Comprehensive Assessment of Water Management in Agriculture. Series Vol. 7*. CABI Publication, Wallingford, U.K., pp. 44-57.

Wani, S.P., Rockström, J., Oweis, T. 2009. *Rainfed agriculture: Unlocking the Potential*. 2009. CABI International, Cambridge, Massachusetts. ISBN: 978-1-84593-389-0

Chapters:

Can rainfed agriculture feed the world? An assessment of potentials and risk *Rainfed Agriculture: Unlocking the Potential* EID: 2-s2.0-79959226952

Preface *Rainfed Agriculture: Unlocking the Potential* EID: 2-s2.0-84890233570

Rainfed agriculture - past trends and future prospects *Rainfed Agriculture: Unlocking the Potential* EID: 2-s2.0-84890241463

Rainfed agriculture: Unlocking the potential *Rainfed Agriculture: Unlocking the Potential* EID: 2-s2.0-79960636830

Zooming in on the global hotspots of rainfed agriculture in water-constrained environments *Rainfed Agriculture: Unlocking the Potential* EID: 2-s2.0-78649452405

2008

ISI Publications

Falkenmark, M. and J. Rockstrom. 2008. Building resilience to drought in desertification-prone savannas in Sub-Saharan Africa: The water perspective, *Natural Resources Forum* 32 (2), pp. 93-102.

Temesgen, M., J. Rockstrom, H. H. G. Savenije, W. B. Hoogmoed and D. Alemu. 2008. Determinants of tillage frequency among smallholder farmers in two semi-arid areas in Ethiopia, *Physics and Chemistry of the Earth* 33, pp. 183-191.

Non-ISI Publications

Rockström, J., Wani, S.P., Hatibu, N., Oweis, T., Karlberg, L., Barron, J., Bruggeman, A., Farahani, J., Qiang, Z., 2008, Unlocking the Potential of Rainfed Agriculture; The Need for a Paradigm Shift in Water Resource Management. *Agricultural Water Management*.

Karlberg, L., Barron, J., Rockström, J., 2008, Water productivity and green water management in agro-ecosystems. In: Förare, J. (Ed.) *Water for Food*. FORMAS, 136 pp.

Deutsch, L., Eckerberg, K., Galaz, V., Mäler, K-G., Rockström, J., Folke, C., Lundholm, C., Moberg, F. Sörlin, S., 2008, "Utmaningen — forskare om en hållbar mänsklighet" (The Challenge - Researchers on a Sustainable Humankind)., Vetenskapsrådet

Rockström, J., Johansson, T. B., Bern manipulerar klimatfakta, debattartikel, Brännpunkt, Svenska Dagbladet, 2008-11-22

Rockström, J., Steffen, W., Noone, K., Folke, C., Sörlin, S., Broman, D., Svedin, U., Persson, Å., Nykvist, B. and Karlberg, L., 2008, Steering away from catastrophic thresholds: Planetary boundaries for human survival. Background paper for the Tällberg Pre-Forum Workshop, 24-26th of June 2008.

Rockström, J., P. Kaumbutho, J. Mwalley, A.W. Nzabi, M. Temesgen, L. Mawenya, J. Barron, J. Mutua, S. Damgaard-Larsen. B). *Conservation Farming Strategies in East and Southern Africa : Yields and Rain Water Productivity from On-Farm Action Research*. *Soil & Tillage Research*.

2007

ISI Publications

Kahinda, J. M. M., J. Rockstrom, A. E. Taigbenu and J. Dimes. 2007. Rainwater harvesting to enhance water productivity of rainfed agriculture in the semi-arid Zimbabwe, *Physics and Chemistry of the Earth* 32, pp. 1068-1073.

Makurira, H., H. H. G. Savenije, S. Uhlenbrook, J. Rockstrom and A. Senzanje. 2007. Towards a better understanding of water partitioning processes for improved smallholder rainfed agricultural systems: A case study of Makanya catchment, Tanzania, *Physics and Chemistry of the Earth* 32, pp. 1082-1089.

Karlberg, L., J. Rockstrom, J. G. Annandale and J. M. Steyn. 2007. Low-cost drip irrigation - A suitable technology for southern Africa? An example with tomatoes using saline irrigation water, *Agricultural Water Management* 89, pp. 59-70.

Rockstrom, J., M. Lannerstad, and M. Falkenmark. 2007. Assessing the water challenge of a new green revolution in developing countries, *Proceedings of the National Academy of Sciences of the United States of America* 104 (15), pp. 6253-6260.

Rockstrom, J. and J. Barron. 2007. Water productivity in rainfed systems: overview of challenges and analysis of opportunities in water scarcity prone savannahs, *Irrigation Science* 25 (3), pp. 299-311.

Non-ISI Publications

de Fraturier C., D. Wichelns, J. Rockström, E. Kemp-Benedict, N. Eriyagama, L.J. Gordon, M.A. Hanjra, J. Hoogeveen, A. Huber-Lee and L. Karlberg. 2007. Looking Ahead to 2050: Scenarios of Alternative Investment Approaches. In. Molden D. (editor) *Water for Food, Water for Life: A Comprehensive Assessment of Water Management in Agriculture*. pp. 91-145. Earthscan, London.

Rockström, J., N. Hatibu, T. Oweis, S. Wani, J. Barron, A. Bruggeman, Z. Qiang, J. Farahani and L. Karlberg. 2007. Managing Water in Rainfed Agriculture. In. Molden D. (editor) *Water for Food, Water for Life: A Comprehensive Assessment of Water Management in Agriculture*. Chapter 9: 315-348. Earthscan, London. UK, pp. 315-352. ISBN 978-1-84407-396-2

Lundqvist, J., J. Barron, G. Berndes, A. Berntell, M. Falkenmark, L. Karlberg, and J. Rockström. 2007. Water pressure and increases in food and bioenergy demand - implications of economic growth and options for de-coupling (ch.3). 'Scenarios on economic growth and resource demand' Background report to the Swedish Environmental Advisory Council memorandum 2007:1

2006

ISI Publications

Ngigi, S. N., J. Rockstrom and H. H. G. Savenije. 2006. Assessment of rainwater retention in agricultural land and crop yield increase due to conservation tillage in Ewaso Ng'iro river basin, Kenya, *Physics and Chemistry of the Earth* 31, pp. 910-918.

Falkenmark, M. and J. Rockstrom. 2006. The new blue and green water paradigm: Breaking new ground for water resources planning and management, *Journal of Water Resources Planning and Management* 132(3), pp. 129-132.

Thomalla, F., T. Downing, E. Spanger-Siegfried, G. Y. Han and J. Rockstrom. 2006. Reducing hazard vulnerability: towards a common approach between disaster risk reduction and climate adaptation, *Disasters* 30 (1), pp. 39-48.

2005

ISI Publications

Guzha, E., I. Nhapi and J. Rockstrom. 2005. An assessment of the effect of human faeces and urine on maize production and water productivity, *Physics and Chemistry of the Earth* 30(11-16 SPEC. ISS.), pp. 840-845.

Ngigi, S. N., H. H. G. Savenije, J. Rockstrom and C. K. Gachene. 2005. Hydro-economic evaluation of rainwater harvesting and management technologies: Farmers' investment options and risks in semi-arid Laikipia district of Kenya, *Physics and Chemistry of the Earth* 30(11-16 SPEC. ISS.), pp. 772-782.

Maisiri, N., A. Senzanje, J. Rockstrom and S. J. Twomlow. 2005. On farm evaluation of the effect of low cost drip irrigation on water and crop productivity compared to conventional surface irrigation system, *Physics and Chemistry of the Earth* 30(11-16 SPEC. ISS.), pp. 783-791.

Adger, W. N., T. P. Hughes, C. Folke, S. R. Carpenter and J. Rockstrom. 2005. Social-ecological resilience to coastal disasters, *Science* 309 (5373), pp. 1036-1039.

Rockstrom, J. and L. Gordon. 2005. Workshop 4 (synthesis): green/blue water management options for crop production, *Water Science and Technology* 51 (8), 119.

Hatibu, N. and J. Rockstrom. 2005. Green-blue water system innovations for upgrading of smallholder farming systems - a policy framework for development, *Water Science and Technology* 51 (8), pp. 121-131.

Ngigi, S. N., H. H. G. Savenije, J. N. Thome, J. Rockstrom and F. W. T. P. de Vries. 2005. Agro-hydrological evaluation of on-farm rainwater storage systems for supplemental irrigation in Laikipia district, Kenya, *Agricultural Water Management* 73 (1), pp. 21-41.

Fox, P., J. Rockstrom, and J. Barron. 2005. Risk analysis and economic viability of water harvesting for supplemental irrigation in semi-arid Burkina Faso and Kenya, *Agricultural Systems* 83 (3), pp. 231-250.

2004

ISI Publications

Chigerwe, J., M. Manjengwa, P. van der Zaag, W. Zhakata and J. Rockstrom. 2004. Low head drip irrigation kits and treadle pumps for smallholder farmers in Zimbabwe: a technical evaluation based on laboratory tests, *Physics and Chemistry of the Earth* 29, pp. 1049-1059.

Rockstrom, J., C. Folke, L. Gordon, N. Hatibu, G. Jewitt, F. P. de Vries, F. Rwehumbiza, H. Sally, H. Savenije, and R. Schulze. 2004. A watershed approach to upgrade rainfed agriculture in water scarce regions through Water System Innovations: an integrated research initiative on water for food and rural livelihoods in balance with ecosystem functions, *Physics and Chemistry of the Earth* 29, pp. 1109-1118.

Rockstrom, J. 2004. Making the best of climatic variability: options for upgrading rainfed farming in water scarce regions, *Water Science and Technology* 49 (7), pp. 151-156.

2003

ISI Publications

Rockström, J. 2003. Water for food and nature in drought-prone tropics: vapour shift in rain-fed agriculture, *Philosophical Transactions of the Royal Society of London Series B-Biological Sciences* 358 (1440), pp. 1997-2009.

Barron, J., J. Rockstrom, F. Gichuki and Hatibu, N. 2003. Dry spell analysis and maize yields for two semi-arid locations in east Africa, *Agricultural and Forest Meteorology* 117 (1), pp. 23-37.

Fox, P. and J. Rockstrom. 2003. Supplemental irrigation for dry-spell mitigation of rainfed agriculture in the Sahel, *Agricultural Water Management* 61 (1), pp. 29-50.

Rockström, J. 2003. Resilience building and water demand management for drought mitigation, *Physics and Chemistry of the Earth* 28 (20), pp. 869-877.

Non-ISI Publications

Rappold, G. D., J. Rockstrom, H. H. G. Savenije and M. Todorovic. 2003. Water resources assessment for catchment management, *Physics and Chemistry of the Earth* 28 (4): 161

Figuères, C.M., Tortajada, C., Rockström, J. 2003. Rethinking water management: Innovative approaches to contemporary issues, pp. 1-242.

2002

ISI Publications

Rockström, J., J. Barron and Fox, P. 2002. Rainwater management for increased productivity among small-holder farmers in drought prone environments, *Physics and Chemistry of the Earth* 27 (11), pp. 949-959.

Rahman, A. U., M. A. Kadi and Rockström, J. 2002. Workshop 7 (synthesis): trade-offs in water for food and environmental security - urban/agricultural trade-off, *Water Science and Technology* 45 (8), pp. 191-193.

2001

ISI Publications

Rockström, J. and L. Gordon. 2001. Assessment of green water flows to sustain major biomes of the world: Implications for future ecohydrological landscape management, *Physics and Chemistry of the Earth Part B-Hydrology Oceans and Atmosphere* 26, pp. 843-851.

Rockström, J. 2001. Green water security for the food makers of tomorrow: windows of opportunity in drought-prone savannahs. *Water Sci Technol.* 43(4), pp. 71-78.

Fowler, R. and J. Rockström. 2001. Conservation tillage for sustainable agriculture - An agrarian revolution gathers momentum in Africa, *Soil & Tillage Research* 61 (1), pp. 93-107.

Kuylenstierna, J. and J. Rockström. 2001. Summary and conclusions from the SIWI young professionals workshop - Hydrosolidarity intergenerational challenges: long-term commitment for long-term issues, *Water Science and Technology* 43 (4), pp. 199-201.

2000

ISI Publications

Rockström, J. 2000. Water resources management in smallholder farms in Eastern and Southern Africa: An overview, *Physics and Chemistry of the Earth Part B-Hydrology Oceans and Atmosphere* 25 (3), pp. 275-283.

Fox, P. and J. Rockstrom. 2000. Water-harvesting for supplementary irrigation of cereal crops to overcome intra-seasonal dry-spells in the Sahel, *Physics and Chemistry of the Earth Part B-Hydrology Oceans and Atmosphere* 25 (3), pp. 289-296.

Rockstrom, J. and M. Falkenmark. 2000. Semiarid crop production from a hydrological perspective: Gap between potential and actual yields, *Critical Reviews in Plant Sciences* 19 (4), pp. 319-346.

1999

ISI Publications

Rockström, J., L. Gordon, C. Folke, M. Falkenmark, and M. Engwall. 1999. Linkages among water vapor flows, food production, and terrestrial ecosystem services. *Conservation Ecology* 3(2): 5.

Rockstrom, J., J. Barron, J. Brouwer, S. Galle and de Rouw, A. 1999. On-farm spatial and temporal variability of soil and water in pearl millet cultivation, *Soil Science Society of America Journal* 63 (5), pp. 1308-1319.

Rockström, J. Jansson, A., Folke, C., Gordon, L. 1999. Linking freshwater flows and ecosystem services appropriated by people: The case of the Baltic Sea drainage basin, *Ecosystems* 2 (4), pp. 351-366.

Rockström, J. 1999. On-farm green water estimates as a tool for increased food production in water scarce regions. *Physics and Chemistry of the Earth Part B-Hydrology Oceans and Atmosphere* 24 (4), pp. 375-383.

1998

ISI Publications

Rockström, J. P. E. Jansson and Barron, J. 1998. Seasonal rainfall partitioning under runoff and runoff conditions on sandy soil in Niger. On-farm measurements and water balance modelling, *Journal of Hydrology* 210, pp. 68-92.

Falkenmark, M., W. Klohn, S. Postel, J. Rockstrom, D. Seckler, H. Shuval and Wallace, J. 1998. Water scarcity as a key factor behind global food insecurity: Round table discussion, *Ambio* 27 (2), pp. 148-154.

1997

ISI Publications

Rockstrom, J. and Valentin, C. 1997. Hillslope dynamics of on-farm generation of surface water flows: The case of rain-fed cultivation of pearl millet on sandy soil in the Sahel, *Agricultural Water Management* 33 (2-3), pp. 183-210.

Rockstrom, J. and deRouw, A. 1997. Water, nutrients and slope position in on-farm pearl millet cultivation in the Sahel, *Plant and Soil* 195 (2), pp. 311-327.

1996

Non-ISI Publications

Falkenmark, M. and Rockstrom, J. 1996. Escaping from ongoing land/water mismanagement, *Ambio* 25 (3), pp. 211-212.

1993

ISI Publications

Falkenmark, M. and Rockstrom, J. 1993. Curbing Rural Exodus from Tropical Drylands, *Ambio* 22 (7), pp. 427-437.