

Curriculum vitae di *Maria Cristina Rulli*

PERSONAL DETAILS

Family name, First name: **Rulli, Maria Cristina**

Researcher unique identifier(s): **<https://orcid.org/0000-0002-9694-4262>**

URL for web site: **<https://www.rulli.faculty.polimi.it/>**

EDUCATION AND KEY QUALIFICATIONS

- 08/02/1999 PHD IN HYDROLOGY AND HYDRAULIC ENGINEERING
Faculty of Engineering, Department of Civil and Environmental Engineering, Politecnico di Milano, Milano, Italy.
Name of PhD Supervisor: Prof. Renzo Rosso
- 03/11/1994 MASTER IN ENVIRONMENTAL AND LAND PLANNING ENGINEERING
Faculty of Environmental and Land Planning Engineering, University of Perugia, Italy

CURRENT POSITION

- 2019 -2025 FULL PROFESSOR:
Faculty of Environmental and Land Planning Engineering, Department of Civil and environmental Engineering, Politecnico di Milano, Milano, Italy

PREVIOUS POSITION(S)

- 2013- 2019 ASSOCIATE PROFESSOR:
Faculty of Environmental and Land Planning Engineering, Department of Civil and environmental Engineering, Politecnico di Milano, Milano, Italy
- 2003 – 2013 ASSISTANT PROFESSOR:
Faculty of Environmental and Land Planning Engineering, Department of Civil and environmental Engineering, Politecnico di Milano, Milano, Italy
- 2012 ADJUNCT RESEARCHER
National Research Council of Italy, Biometeorology division, Sassari, Italy
- 2000-2003 POSTDOCTORAL RESEARCH ASSOCIATE
Faculty of Environmental and Land Planning Engineering, Department of Civil and environmental Engineering, Politecnico di Milano, Milano, Italy
- 1998 RESEARCH ASSOCIATE
Department of Earth and Planetary Science, University of California at Berkeley, Berkeley, CA, USA.

SCIENTIFIC PROFILE:

RESEARCH ACHIEVEMENTS AND PEER RECOGNITION

RESEARCH ACHIEVEMENTS

BIBLIOGRAPHY

MARIA CRISTINA RULLI IS THE AUTHOR OF 170 PUBLICATIONS, 151 OF THEM IN PEER REVIEWED SCIENTIFIC JOURNAL.
STANFORD/ELSEVIER'S TOP 2% SCIENTIST

NUMBER OF CITATIONS RECORDED BY SCOPUS
SCOPUS TOTAL CITATIONS: 7863 (AS FOR JULY 2025)
H-INDEX: 50

NUMBER OF CITATIONS RECORDED BY WEB OF SCIENCE
WOS TOTAL CITATIONS: 7059 (AS FOR JULY 2025)
H-INDEX: 46

7 🏆 PAPER ARE **HIGHLY CITED** (TOP 1% of the academic field)
1 🔥 PAPER IS **HOT PAPER** (TOP 0.1% of the academic field)

PEER RECOGNITION, HONORS

ELECTED ACADEMY MEMBERSHIPS

2025 FELLOW, ITALIAN ACADEMY OF ENGINEERING AND TECHNOLOGY (ITATEC)
2024 FELLOW, ISTITUTO VENETO DI SCIENZE, LETTERE ED ARTI (IVSLA)
2024 UNION FELLOW, AMERICAN GEOPHYSICAL UNION

PRIZES, AWARDS, RECOGNITIONS

2024 PRINCE SULTAN ABDULAZIZ INTERNATIONAL PRIZE ON WATER
2023; 2024 2% WORLD TOP CITED SCIENTISTS. RANKING DEVELOPED BY STANFORD UNIVERSITY AND ELSEVIER
2003 YUNG RESEARCHER AWARD, INSTITUTE FOR MOUNTAIN RESEARCH
2002 PRIZE INNOVATIONS FOR THE ENVIRONMENT, LEGAMBIENTE FOUNDATION
1996 MAGNA CUM LAUDE, UNIVERSITY OF PERUGIA

INVITED LECTURES TO MAJOR CONFERENCES; INSTITUTIONAL EVENTS, FORUM

2023 GENERAL LECTURE-ITALIAN REPUBLIC SENATE

LECTURE ON "HYDROLOGY: FROM THE BASIN TO THE GLOBAL SCALE"

2023 ROSENBERG INTERNATIONAL FORUM ON WATER POLICY. INVITED FORUM SPEAKER

2022 DISTINGUISHED LECTURE-ACCADEMIA NAZIONALE DEI LINCEI

LECTURE ON "THE ROLE OF WATER IN ACHIEVING SUSTAINABLE FOOD AND WATER SECURITY"

2021 GENERAL LECTURE AGU UNION SESSION *THE GRAND TRANSFORMATION NEEDED TO ADDRESS CLIMATE CHANGE.*

LECTURE ON "FOOD, ENERGY AND WATER NEXUS IN THE CONTEXT OF GLOBAL HEALTH"

2021 GENERAL LECTURE US EMBASSY MANILA

LECTURE ON LAND USE CHANGE, THE LIVESTOCK REVOLUTION, AND CORONAVIRUSES

2019 GENERAL LECTURE AGU CENTENNIAL CELEBRATION, BEIJING, CHINA.

LECTURE ON THE GLOBAL FOOD-ENERGY-WATER NEXUS: HOW WATER CONTROLS SUSTAINABLE FOOD SECURITY

2016 GENERAL LECTURE ITALIAN REPUBLIC SENATE

LECTURE ON "GENDER AND WATER SECURITY"

2015 DISTINGUISHED LECTURE-ISTITUTO LOMBARDO ACCADEMIA DI SCIENZE E LETTERE

LECTURE ON "WATER RESOURCES TO FEED THE PLANET"

COORDINATION/PI/PARTICIPATION OF EUROPEAN AND INTERNATIONAL PROJECTS (SINCE 2020)

- 2025-2028 DOWES- Disclosing the Overlooked Wetlandscape Ecosystem Services. Project granted by European Union WATER4ALL initiative. (1400K €). Role: OU coordinator.
- 2025-2028 NBS4DROUGHT-Nature Based Solutions for Drought. Project granted by European Union HORIZON program. (8000K €). Role: Participant.
- 2024-2026 CCI-AWU-Climate Change Initiative on Anthropogenic Water Use. Project granted by European Space Agency (ESA). (800K €). Role: OU coordinator.
- 2024-2026-CASTLE-Creating Agricultural reSilience Through small rEservoirs. Project granted by Italian Ministry of University and Reseach (MUR) (300 k€). Role: OU coordinator.
- 2022-2025 AG-WAMED-Advancing non conventional water management for innovative climate-resilient water governance in the Mediterranean Area. Project granted by European Union (1400K €). Role: OU coordinator.
- 2021-2025 NEXUS-NESS-NEXUS Nature Ecosystem Society Solution: Fair and Sustainable Resource Allocation Demonstrator of the Multiple WEF E Nexus Economic, Social and Environmental Benefits for Mediterranean Regions- Project granted by European Union (1800K €). Role: OU coordinator
- 2019-2023 AWESOME- mAnaging Water, Ecosystems and food across sectors and Scales in the sOuth Mediterranean. Project granted by European Union (1900K €). Role: participant
- 2019-2023 NEWAVE -Next WAtER GoVERNance H2020 Marie Sklodowska-Curie Innovative Training Network. Project granted by European Union (5000K €). Role: OU coordinator
- 2019-2021 FLORIMAP- Smart FLOod Risk MAnagement Policies. Project granted by Cariplo foundation (300K €). Role: OU coordinator
- 2018-2020 MHYCONOS- Mapping the HYdrological Control on shallOw landSliding. Project granted by CARIPO Foundation. (190K €). Role: Principal investigator
- 2018-2020 Sustainable MAnagement of sediment transpoRT in responSE to climate change conditions (SMARTSED), Project funded by CARIPO Foundation. (200K €). Role: participant

PEER REVIEWER ACTIVITY OF NATIONAL AND INTERNATIONAL GRANTS

- 2013 COORDINATOR OF THE EXPERTS EVALUATION PANELS (AREA ERC PE808) OF RESEARCH PROPOSALS "FUTURE OF RESEARCH". MINISTRY OF EDUCATION, UNIVERSITY AND RESEARCH - MIUR (ITALY). DECREE OF MINISTER OF EDUCATION, UNIVERSITY AND RESEARCH (JULY 23, 2013)
- EVALUATOR OF GRANT PROPOSAL FOR MULTIPLE FUNDING AGENCIES SUCH AS EUROPEAN UNION RESEARCH COUNCIL (ERC), SWISS NATIONAL SCIENCE FOUNDATION, EUROPEAN SCIENCE FOUNDATION (ESF); AUSTRIAN PARTNERSHIP PROGRAMME IN HIGHER EDUCATION AND RESERCH FOR DEVELOPMENT (APPEAR), ITALIAN MINISTRY OF UNIVERSITY AND RESEARCH (MUR) ETC...

SCIENTIFIC ADVISING:

FAO (FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS); ESA (EUROPEAN SPACE AGENCY), ITALIAN MINISTRY OF ENVIRONMENT, LAND AND SEA, FEEM FOUNDATION, CARIPO FOUNDATION, ENI (ENTE IDROCARBURI).

INTERNATIONAL ACADEMIC RESEARCH EXPERIENCE:

- 2023 (AUG-SEPT) VISITING SCHOLAR, DEPARTMENT OF PUBLIC HEALTH, UNIVERSITY OF SAN PAOLO, SAN PAOLO, BRAZIL.
ACTIVITY (TEACHING TO GRADUATE STUDENTS; RESEARCH; RESEARCH SUPERVISION)
- 2014; 2015 VISITING RESEARCHER, NATIONAL SOCIO-ENVIRONMENTAL SYNTHESIS CENTER (SESYNC), UNIVERSITY OF MARYLAND, ANNAPOLIS, MA, USA.
ACTIVITY (RESEARCH)
- 2013 VISITING SCHOLAR, DEPARTMENT OF ENVIRONMENTAL SCIENCE, UNIVERSITY OF VIRGINIA, CHARLOTTESVILLE, VA, USA.
ACTIVITY (RESEARCH; RESEARCH SUPERVISION)
- 1998 RESEARCH ASSOCIATE, DEPARTMENT OF EARTH AND PLANETARY SCIENCE, UNIVERSITY OF CALIFORNIA AT BERKELEY, BERKELEY, CA, USA.
ACTIVITY (RESEARCH)

OTHER CONTRIBUTIONS TO THE RESEARCH COMMUNITY

EDITORIAL SERVICE:

EDITOR, EARTH'S FUTURE (2024-PRESENT)

EDITORIAL BOARD MEMBER, ADVANCES IN WATER RESOURCES (2021-PRESENT); HYDROLOGICAL SCIENCE JOURNAL (2023-PRESENT), SCIENTIFIC DATA (2023-PRESENT), FRONTIERS IN ENVIRONMENTAL SCIENCES (2018-PRESENT).

GUEST EDITOR, ADVANCES IN WATER RESOURCES (2017-2019)

REVIEWER AND PANELIST:

200+ MANUSCRIPTS FOR PEER-REVIEWED JOURNALS INCLUDING WATER RESOURCES RESEARCH, GRL, EARTH'S FUTURE, NATURE, NATURE FOOD, NATURE GEOSCIENCE, PNAS, SCIENCE ADVANCES, BIOSCIENCE

ADVISING AND MENTORING ACTIVITY

12 POSTDOC

20 PH.D. STUDENTS. Seven of these received the cum magna laude distinction for their PhD thesis.

+90 M S STUDENTS IN ENVIRONMENTAL ENGINEERING. Three of these theses received the CIRITA award as the best Master's thesis of the year; another thesis was awarded in 2007 with the "City and Security" award as best master thesis of the year and in 2016 another thesis received the prestigious SPE (Society of Petroleum Engineers) mention as the best master thesis of the year in analysing the impact of energy production on water resources.

MENTORING-Women in Science; Talented girls in STEM (SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS)

ACADEMIC AND PROFESSIONAL SOCIETIES ENGAGEMENT

ROLES IN THE SCIENTIFIC SYSTEM, AT THE NATIONAL AND INTERNATIONAL LEVELS (SCIENTIFIC SOCIETIES, COMMISSIONS, WORKING GROUPS, EVALUATION PANELS)

ITALIAN WATER ENGINEERING SOCIETY (GII), VICE-PRESIDENT (2021-PRESENT), ELECTED MEMBER OF THE SCIENTIFIC BOARD (2021-PRESENT); MEMBER (2017-PRESENT)

AMERICAN GEOPHYSICAL UNION, ELECTED UNION FELLOW

ISTITUTO VENETO DI SCIENZE, LETTERE ED ARTI, ELECTED FELLOW

ITALIAN HIGHER EDUCATION WITH AFRICA (IHEA), MEMBER, TRAINER, MENTOR (2024-PRESENT).

ITALIAN SOCIETY OF HYDROLOGY (SII) ELECTED MEMBER OF THE SCIENTIFIC BOARD (2016-2020), MEMBER (2017-PRESENT).

WATER RESOURCES DOCUMENTATION CENTER (WARREDOC), MEMBER OF THE ADVISORY BOARD (2016-PRESENT)

INTERDISCIPLINARY RESEARCH CENTRE ON SUSTAINABILITY AND HUMAN SECURITY (SHUS), ELECTED MEMBER OF THE ADVISORY BOARD (2016-PRESENT)

AMERICAN GEOPHYSICAL UNION (AGU), SECTION FELLOWS REVIEW COMMITTEES MEMBER (2025-2027)

COORDINATOR OF THE EXPERTS EVALUATION PANELS (AREA ERC PE808) OF RESEARCH PROPOSALS "FUTURE OF RESEARCH". MINISTRY OF EDUCATION, UNIVERSITY AND RESEARCH - MIUR (ITALY). DECREE OF MINISTER OF EDUCATION, UNIVERSITY AND RESEARCH (JULY 23, 2013).

ORGANIZATION OF INTERNATIONAL CONFERENCE, CONGRESS, WORKSHOP

MC Rulli chaired international conferences (e.g. AGU, EGU, IAHS, EWRA, ICID, GII Indo-Italian Workshop; Warredoc winter school, Warredoc workshop etc.), successfully organizing sessions, coordinating with international speakers, and overseeing logistics for attendees.

She also managed the abstract submission process and ensured the conference program was diverse and engaging.

THIRD MISSION: OUTREACH AND DISSEMINATION OF RESEARCH FINDINGS TO GENERAL PUBLIC

COMMITMENT TO THE DISSEMINATION OF SCIENTIFIC RESULTS TO THE GENERAL PUBLIC: 40+ Seminars to elementary, middle and high school students, 30+ Seminars to humanitarian service organization, 30+ Seminars to private and public companies, foundations and enterprises on the relationship existing between water and food production and on the role of engineering and technology in facing global challenges; on the complex issues related to resource scarcity and the societal impacts of global environmental change, with particular focus on health.

MC RULLI RESEARCH FINDINGS REPORTED BY POLICY DOCUMENTS:

World Health Organization (WHO) (2023) "Climate change, food, water and population health in China" <http://dx.doi.org/10.2471/BLT.15.167031>.

World Health Organization (WHO) (2022) "Impact of climate change on biodiversity, agriculture and health:" Intergovernmental Panel on Climate Change (IPCC) (2022) "Agriculture, Forestry and Other Land Uses (AFOLU)" doi: 10.1017/9781009157926.009

Food and Agriculture Organization of the United Nations (2022) "Land and water: the rights divergence" <https://openknowledge.fao.org/handle/20.500.14283/cb9043en>

Food and Agriculture Organization of the United Nations (2020) "Extraterritorial investments in agriculture in Africa: the perspectives of China and South Africa" <https://doi.org/10.4060/cb1106en>

European Commission. Science for Environment Policy (2013) "With the land goes the water: 'land grabbing' redistributes global water resources", 21 Feb. 2013.

The Publications Office of the European Union. New ways of providing knowledge to tackle food and nutrition security - EU Law and Publications 2016

Food and Agriculture Organization of the United Nations "Status of the World's Soil Resources. FAO 2016

World Bank "Challenges and Opportunities in Malawi's Estate Sector" <https://openknowledge.worldbank.org/handle/10986/28378> License: CC BY 3.0 IGO."

MC RULLI RESEARCH FINDINGS REPORTED BY MEDIA DOCUMENTS:

THE NATION (20 Jan 2025) Global model shows how diet can reduce environmental impact

ALLABOUTFEED (05 Feb 2024) Use of by-products increases land and water resource savings

TECHNOLOGY NETWORKS (18 Jan 2024) If Reused as Animal Feed, Cereal Pulp Could Free Up Millions of Hectares of Farmland

IL GIORNO (16 Jan 2025) Global model shows how diet can reduce environmental impact

LIBERO (16 Jan 2025) Ridurre l'uso di risorse idriche e terra tramite diete sostenibili e salutari

INSALUTE NEWS (16 Jan 2025) Un futuro sostenibile: come ottimizzare risorse e dieta globale per proteggere il pianeta

SCIENMAG (16 Jan 2025) Politecnico Study in Nature Highlights Strategies for Minimizing diet environmental impact

MIRAGE NEWS (16 Jan 2025) Politecnico Study: Cut Diet's Eco Impact

LE SCIENZE LE SCIENZE (16 Jan 2025) Ridurre l'uso di risorse idriche e terra tramite diete sostenibili e salutari

HEALTH REPORTER (08 Mar 2024) Assessment of the impact of a personalised nutrition intervention in impaired glucose regulation over 26 weeks: a randomised controlled trial”

HEALTH REPORTER (03 Mar 2024) Using drivers and transmission pathways to identify SARS-like coronavirus spillover risk hotspots

THE DECCAN HERALD (16 May 2023) How a deadly bat virus found new ways to infect people

NATIONAL GEOGRAPHIC (23 Jun 2021) Humans are creating hot spots where bats could transmit zoonotic diseases

TRIBUNE INDIA (03 Jun 2021) Global 'hot spots' where new coronaviruses may emerge identified

TIMES OF INDIA (03 Jun 2021) Global 'hot spots' where new coronaviruses may emerge identified

SKY ITALIA TG24 (31 May 2021) Studio: individuate nel mondo possibili aree a rischio nuove pandemie Salute e Benessere 31 mag - 18:56

NATURE ASIA (31 May 2021) Ecology: Coronavirus outbreak risk from hotspots of bat presence and livestock(Nature Food)

VOX.COM (31 May 2021) Where could the next coronavirus jump to humans?

THE GUARDIAN (27 June 2014) Land taken over by foreign investors could feed 550m people, study finds

NEW SCIENTIST (27 June 2014) Ethical land grabbing' could feed 550 million people

SCIENTIFIC AMERICAN (February 12, 2013) Corporations Grabbing Land and Water Overseas

WASHINGTON POST (26 Jan 2013) Chinese firms and Gulf sheiks are snatching up farmland worldwide. Why?

MOTHER JONES (6 Feb 2013) The top 5 land grabbing countries

PANORAMA (30 Jan 2013) La grande caccia all'acqua

CORRIERE DELLA SERA (28 Jan 2013) Land grabbing: più del neocolonialismo, devastante per l'ambiente

FAMIGLIA CRISTIANA (Feb 2013) Interview on land and water grabbing

SELECTED PUBLICATIONS

- Rulli, M. C., Galli, N., John, R. S., Muylaert, R. L., Santini, M., Hayman, D. T. (2025). Land Use Change and Infectious Disease Emergence. *Reviews of Geophysics*, 63(2), e2022RG000785. <https://doi.org/10.1029/2022RG000785>.
- Govoni, C., Zhuo, L., Lobos Marchioni D., Rulli, M.C. (2025), China's animal protein-rich diets are increasingly reliant on Brazil's land and water resources *Nature Food*, in press.
- Wolde S.G., D'Odorico P., Rulli M.C (2025). Adapt or Depart: The Nexus between Environmental Migration and Water Deficiency for Food and Livestock Production in Somalia. *Nature Food*, in press.
- Galli, N., Nanesha, H., Tolazzi, A., Chiarelli D.D., Rulli M.C. (2025). The AIDA 1 km resolution crop-specific rainfed and irrigated areas and green and blue water demands for Italy. *Scientific Data* 12, 1041 . <https://doi.org/10.1038/s41597-025-05390-1>
- Deng, Q., Sharretts, T., Ali, T., Ao, Y.Z., Chiarelli, D.D., Demeke, B., Marston L., Mehta, p., Mekonnen, M., Rulli, M.C., Tuninetti, M., Xie. W., Davis K.F. (2025). Deepening water scarcity in breadbasket nations. *Nature Communications* 16, 1110 (2025). <https://doi.org/10.1038/s41467-025-56022-6>.
- Chiriaco, M. V., Galli, N., Latella, M., Rulli, M. C. (2025). Pressure on Global Forests: Implications of Rising Vegetable Oils Consumption Under the EAT-Lancet Diet. *Global Change Biology*, 31(2), e70077. <https://doi.org/10.1111/gcb.70077>.
- Curioni, M., Galli, N., Manzolini, G., Rulli, M. C. (2025). Global Land-Water Competition and Synergy Between Solar Energy and Agriculture. *Earth's Future*, 13(2), e2024EF005291. <https://doi.org/10.1029/2024EF005291>
- Rulli, M.C., Sardo, M., Ricciardi, L., Govoni, C., Chiarelli, D., Galli, N., Komarek, A., D'Odorico, P. (2024) Meeting the EAT- Lancet 'healthy' diet target while protecting land and water resources. *Nature Sustainability*, <https://doi.org/10.1038/s41893-024-01457-w>.
- Posada-Marín, J., Salazar, J., Rulli, M.C., Wang-Erlandsson, L, Jaramillo, F. (2024) Upwind moisture supply increases risk to water security. *Nature Water*. <https://doi.org/10.1038/s44221-024-00291-w>
- Yang, Y., Tilman, D., Jin, Z, Smith, P., Barrett, C.B., Zhu, Y-G., Burney, J., D'Odorico, P., Fantke, P., Fargione, J., Finlay, J., Rulli, M.C., Sloat, L., van Groenigen, K.J., West, P.C., Ziska, L., Michalak, A.M., the Clim-Ag Team, Lobell, D.B.(2024) Climate change exacerbates the environmental impacts of agriculture. *Science*, 385, eadn3747.
- D'Odorico, P., Dell'Angelo, J., Rulli, M.C. (2024) Water commons grabbing and (in)justice. *Nature Water* 2, 300–302. <https://doi.org/10.1038/s44221-024-00231-8>
- Ricciardi, L. P. D'Odorico, M.C. Rulli, (2024) To what extent can agriculture be reshaped to address healthy and sustainable diets by boosting pulse production locally?. *Global Food Security*, 40, 100734. <https://doi.org/10.1016/j.gfs.2023.100734>.
- Govoni, C., Chiarelli, D.D., Rulli, M.C. (2024) A global dataset of the national green and blue water footprint of livestock feeds. *Scientific Data* 11, 1419. <https://doi.org/10.1038/s41597-024-04264-2>.
- D'Odorico, P., Dell'Angelo, J., & Cristina Rulli, M. (2024). Appropriation pathways of water grabbing. *World Development*, 181, 106650. <https://doi.org/10.1016/j.worlddev.2024.106650>

- Govoni, C. P. D'Odorico, L. Pinotti, and M.C. Rulli (2023), Preserving global land and water resources through the replacement of livestock feeds with agricultural by-products. *Nature Food*, 4 (12), 1047-1057. <https://doi.org/10.1038/s43016-023-00884-w>
- Dell'Angelo J., Rulli M.C., D'Odorico P. (2023) Will war in Ukraine escalate the global land rush? *Science*, 379 (6634), 752755. <https://www.science.org/doi/10.1126/science.adf9351>.
- Wolde S., D'Odorico P., Rulli M.C (2023). Environmental drivers of human migration in Sub-Saharan Africa. *Global Sustainability*, 6, E9. doi:10.1017/sus.2023.5
- Sardo M., Epifani I., D'Odorico P., Galli N., Rulli M.C. (2023) Exploring the water–food nexus reveals the interlinkages with urban human conflicts in Central America, *Nature Water*, 22-0477. <https://doi.org/10.1038/s44221-023-000530>.
- Galli, N., Chiarelli, D. D., Ricciardi, L., & Rulli, M. C. (2023). A Blue Water Scarcity-Based Method for Hydrologically Sustainable Agricultural Expansion Design. *Water Resources Research*, 59(10), e2023WR034473. <https://doi.org/10.1029/2023WR034473>
- Wang, L., Jiao, W., MacBean, N., Rulli M.C., Manzoni S., Vico G., D'Odorico P. (2022) Dryland productivity under a changing climate. *Nature Climate Change* 12, 981–994 (2022). <https://doi.org/10.1038/s41558-022-01499-y>
- Galli, N., Dell'Angelo, J., Epifani, I., Rulli M.C. (2022) Socio-hydrological features of armed conflicts in the Lake Chad Basin. *Nature Sustainability* 5, 843–852 (2022). <https://doi.org/10.1038/s41893-022-00936-2>
- Chiarelli D.D., D'Odorico P., Müller M.F., Mueller N.D., Davis K.F., Dell'Angelo J., Penny G., Rulli M.C. (2022) Competition for water induced by transnational land acquisitions for agriculture, *Nature Communications*, 13, 505 (2022). <http://dx.doi.org/10.1038/s41467-022-28077-2>.
- Tatlhego, M., D.D. Chiarelli, M.C. Rulli, P. D'Odorico (2022). The value generated by irrigation in the command areas of new agricultural dams in Africa, *Agric. Water. Management.*, 264, 107517, <doi.org/10.1016/j.agwat.2022.107517>.
- Ricciardi L., D'Odorico P., Galli N., Chiarelli D.D., Rulli M.C. (2022) Hydrological implications of large-scale deforestation in tropical biomes for climate change migration, *Philosophical Transactions of the Royal Society B* 377, 20210391. <http://doi.org/10.1098/rstb.2021.0391>
- Muylaert R. L., Kingston T., Luo J., Vancine M.H., Galli N., Carlson C.J., John R.S., Rulli M.C., Hayman D.T. S. (2022) Present and future distribution of bat hosts of sarbecoviruses: implications for conservation and public health, *Proceedings of the Royal Society B*.2892022039720220397. <http://doi.org/10.1098/rspb.2022.0397>
- Rulli M.C., D'Odorico P., Galli N., Hayman D.T.S. (2021), Land-use change and the livestock revolution increase the risk of zoonotic coronavirus transmission from rhinolophid bats, *Nature Food*, 2(6), 409-416. <https://doi.org/10.1038/s43016021-00285-x>.
- Jenkins W., Rosa L., Schmidt J., Band L., Beltran-Peña A., Clarens A., Doney S., Emanuel R.E., Glassie A., Quinn J., Rulli M.C., Shobe W.I., Szeptycki, L., D'Odorico P. (2021) Values-Based Scenarios of Water Security: Rights to Water, Rights of Waters, and Commercial Water Rights, *BioScience*, 71, 11, 1157–1170. <https://doi.org/10.1093/biosci/biab088>

- Müller M.F., Penny G., Niles M.T., Ricciardi V., Chiarelli D.D., Davis K.F., Dell'Angelo J., D'Odorico P., Rosa L., Rulli M.C., Mueller N.D. (2021). Impact of transnational land acquisitions on local food security and dietary diversity. *Proceedings of the National Academy of Sciences of the United States of America*, 118(4), e2020535118. <https://doi.org/10.1073/pnas.2020535118>.
- Rosa L., Rulli M.C., Ali S., Chiarelli D.D., Dell'Angelo J., Mueller N.D., Scheidel A., Siciliano G., D'Odorico P. (2021), Energy implications of the 21st century agrarian transition, *Nature Communications*, 12(1), 2319. <https://doi.org/10.1038/s41467-021-22581-7>.
- Rosa L., Chiarelli D. D., Rulli M. C., Dell'Angelo J., D'Odorico P. (2020). Global agricultural economic water scarcity. *Science Advances*, 6, eaaz6031. <http://dx.doi.org/10.1126/sciadv.aaz6031>.
- Chiarelli, D.D., C. Passera, L. Rosa, K. F. Davis, P. D'Odorico, and M. C. Rulli (2020). Global gridded dataset of crop-specific green and blue water requirements, the WATNEEDS model. *Scientific Data*. 7, 273
- D'Odorico P., Chiarelli D.D., Rosa L., Bini A., Zilberman D., Rulli M.C. (2020). The global value of water in agriculture. *Proceedings of the National Academy of Sciences of the United States of America*, 117, 21985-21993. <http://dx.doi.org/10.1073/pnas.2005835117>
- Rosa L., Chiarelli D.D., Sangiorgio M., Beltran-Peña A.A., Rulli M.C., D'Odorico P., Fung I. (2020). Potential for sustainable irrigation expansion in a 3 °C warmer climate. *Proceedings of the National Academy of Sciences of the United States of America*, 117. <http://dx.doi.org/29526-29534>, 10.1073/pnas.2017796117.
- Davis K. F., Koo H. I., Dell'Angelo J., D'Odorico P., Estes L., Kehoe L. J., Kharratzadeh M., Kuemmerle T., Machava D., Pais A. J. R., Ribeiro N., Rulli M.C., Tatlhego M. (2020). Tropical forest loss enhanced by large-scale land acquisitions. *Nature Geoscience*, 13, 482-488, <http://dx.doi.org/10.1038/s41561-020-0592-3>
- Rulli M.C., Casirati S., Dell'Angelo J., Davis K.F., Passera C., D'Odorico P. (2019), Interdependencies and telecoupling of oil palm expansion at the expense of Indonesian rainforest, *Renewable and Sustainable Energy Reviews*, 105, 499, 512, 21. <http://dx.doi.org/10.1016/j.rser.2018.12.050>.
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