# Ralph P. Hall, MEng, S.M., S.M., PhD

Associate Professor, Urban Affairs and Planning (UAP), School of Public and International Affairs (SPIA), Virginia Tech (VT), <a href="http://ralphphall.com/">http://ralphphall.com/</a>, <a href="mailto:@RalphPHall">@RalphPHall</a>

## **Professional Preparation**

Stanford University, California	Civil and Environmental Engineering	Postdoc 2008
MIT, Massachusetts	Technology, Management, and Policy	PhD 2006
MIT, Massachusetts	Technology and Policy	S.M. 2002
MIT, Massachusetts	Civil and Environmental Engineering	S.M. 2002
University of Southampton, England	Civil Engineering	MEng 1999

## **Appointments**

2022-pr.	Affiliated Faculty, Honors College, Virginia Tech
2019-pr.	Associate Director, School of Public and International Affairs (SPIA), Virginia Tech
2016-pr.	Associate Professor, Urban Affairs and Planning, Virginia Tech
2016-pr.	SPIA Undergraduate Programs Director, Virginia Tech
2009-2016	Assistant Professor, Urban Affairs and Planning, Virginia Tech
2006-2008	Postdoctoral Scholar, Civil and Environmental Engineering, Stanford University

### **Fellowships**

Fellow, F.I.R.E. (Forging Interest in Research and Engagement) Starters Program, Virginia Tech, 2021 – present

Fellow, Rhizome living learning community, Virginia Tech, 2021 – present

Fellow, Center for Food Systems and Community Transformation, Virginia Tech, 2019 – present

Fellow, Leadership and Social Change Residential College (LSCRC), Virginia Tech, 2018 – present

#### **Publications**

#### Books

Ashford, N. A. & Hall, R. P. (2018). <u>Technology, Globalization, and Sustainable Development:</u>
<u>Transforming the Industrial State. Revised Edition</u>. Routledge, New York, 774 pages. ISBN: 9781138605534.

Gudmundsson, H., Hall, R. P., Marsden, G., & Zietsman, J. (2015). <u>Sustainable Transportation:</u>
<u>Indicators, Frameworks, and Performance Management</u>. Springer, New York, 304 pages. ISBN: 9783662469231.

Ashford, N. A. & Hall, R. P. (2011). <u>Technology, Globalization, and Sustainable Development:</u>
<u>Transforming the Industrial State</u>. Yale University Press, New Haven, 752 pages. ISBN: 9780300169720.

#### **Peer-reviewed Articles**

- Velez, A.-L., Hall, R. P., & Lewis, S. N. (2021). <u>Designing transdisciplinarity: Exploring institutional drivers and barriers to collaborative transdisciplinary teaching</u>. *Journal of Public Affairs Education*, 1-18. DOI: 10.1080/15236803.2021.1992196.
- GC, R. K., Hall, R. P., & Hammett, A. L. (2021). <u>Thinking beyond domestic water supply: approaches to advance multiple-use water systems (MUS) in the rural hills of Nepal</u>. *Water International*, 47(1), 92-113. DOI: 10.1080/02508060.2021.1966976.

- Holm, R. H., Hall, R. P., Muthukrishnan, S., Munthali, T., & Sinda, M. (2021). Promoting multiple-use water services by leveraging existing rural water supply and smallholder farmer groups, Malawi. *International Journal of Water Resources Development*, *37*(2), 321-338. DOI: 10.1080/07900627.2020.1765745.
- An, Y., Hall, R. P., & Yoon, T. (2021). <u>The Complex Relationship between Capacity and Infrastructure Project Delivery: The Case of the Indian National Urban Renewal Mission</u>. *Sustainability*, 13(16), 9356. DOI: 10.3390/su13169356.
- Gupta, K. & Hall, R. P. (2021). Exploring Smart City Project Implementation Risks in the Cities of Kakinada and Kanpur. Journal of Urban Technology, 28(1-2), 155-173. DOI: 10.1080/10630732.2020.1796115.
- Gupta, K., Zhang, W., & Hall, R. P. (2021). Risk priorities and their co-occurrences in smart city project implementation: Evidence from India's Smart Cities Mission (SCM). Environment and Planning B: Urban Analytics and City Science, 48(4), 880-894. DOI: 10.1177/2399808320907607.
- GC, R. K., Ranganathan, S., Hammett, A. L., & Hall, R. P. (2020). What factors determine the technical performance of community-managed rural water systems in the middle hills of Nepal? Journal of Water, Sanitation and Hygiene for Development, 11(2), 222-230. DOI: 10.2166/washdev.2020.189.
- GC, R. K. & Hall, R. P. (2020). <u>The Commercialization of Smallholder Farming—A Case Study from the Rural Western Middle Hills of Nepal</u>. *Agriculture*, 10(5), 143. DOI: 10.3390/agriculture10050143.
- Ashford, N. A., Hall, R. P., Arango-Quiroga, J., Metaxas, K. M., & Showalter, A. L. (2020). <u>Addressing Inequality: The First Step Beyond COVID-19 and towards Sustainability</u>. *Sustainability*, *12*(13), 5404. DOI: 10.3390/su12135404.
- Gupta, K. & Hall, R. P. (2020). <u>Understanding the What, Why, and How of Becoming a Smart City:</u>
  <u>Experiences from Kakinada and Kanpur</u>. *Smart Cities*, *3*(2), 232-247. DOI: 10.3390/smartcities3020014.
- Hall, R. P., Ashford, R., Ashford, N. A., & Arango-Quiroga, J. (2019). <u>Universal Basic Income and Inclusive Capitalism: Consequences for Sustainability</u>. *Sustainability*, 11(16), 4481. DOI: 10.3390/su11164481.
- Domínguez, I., Oviedo-Ocaña, E. R., Hurtado, K., Barón, A., & Hall, R. P. (2019). <u>Assessing Sustainability in Rural Water Supply Systems in Developing Countries Using a Novel Tool Based on Multi-Criteria Analysis</u>. *Sustainability*, *11*(19), 5363. DOI: 10.3390/su11195363. <u>Supplementary material</u>.
- GC, R. K., Ranganathan, S., & Hall, R. P. (2019). <u>Does Rural Water System Design Matter? A Study of Productive Use of Water in Rural Nepal</u>. *Water*, *11*(10), 1978. DOI: 10.3390/w11101978.
- Yeganeh, A. J., Pearce, A. R., Hall, R. P., & Hankey, S. (2018). <u>A social equity analysis of the U.S. public transportation system based on job accessibility</u>. *Journal of Transportation and Land Use*, 11(1), 1039-1056. DOI: 10.5198/jtlu.2018.1370.
- Stedman, S., Mnyimbiri, A. M., Kawonga, Z., Malota, M., Njera, D., Hall, R. P., & Holm, R. (2018).

  <u>Using irrigation to kick-start multiple-use water services for small-scale farmers in Malawi: A case study of the Nkhata Bay District</u>. *Irrigation and Drainage*, 67(5), 645–653. DOI: 10.1002/ird.2282.
- Ashford, N. A. & Hall, R. P. (2018). <u>Achieving Global Climate and Environmental Goals by Governmental Regulatory Targeting</u>. *Ecological Economics*, *152*, 246-259. DOI: 10.1016/j.ecolecon.2018.06.002.
- Ashford, R., Hall, R. P., & Ashford, N. A. (2017). <u>Koncepcja binary approach jako instrument kształtowania zrównoważonego wzrostu</u>. Ruch Prawniczy, Ekonomiczny i Socjologiczny, *4*, 191-201. DOI: 10.14746/rpeis.2017.79.4.15.

- An, Y., Garvin, M., & Hall, R. P. (2017). <u>Pathways to Better Project Delivery: the Link between Capacity Factors and Urban Infrastructure Projects in India</u>. *World Development*, *94*, 393-405. DOI: 10.1016/j.worlddev.2017.02.004.
- Hall, R. P., Ranganathan, S., & GC, R. K. (2017). <u>A General Micro-level Modeling Approach to Analyzing Interconnected SDGs: Achieving SDG 6 and More through Multiple-Use Water Services (MUS)</u>. *Sustainability*, *9*(2), 314. DOI: 10.3390/su9020314.
- Chirwa, C. F. C., Holm, R. H., Hall, R. P., Krometis, L-A, H., Vance, E., Edwards, A., & Guan, T. (2017). Pit latrine fecal sludge resistance using a dynamic cone penetrometer in low income areas in Mzuzu city, Malawi. International Journal of Environmental Research and Public Health, 14(2), 87. DOI: 10.3390/ijerph14020087.
- van Houweling, E., Hall, R. P., Carzolio, M., & Vance, E. (2016). My neighbor drinks clean water, while I continue to suffer;" an analysis of the intra-community and intra-household impacts of a rural water project in Mozambique. Journal of Development Studies, 53(8), 1147-1162. DOI: 10.1080/00220388.2016.1224852.
- Hall, R. P., van Houweling, E., Huang, W., & Vance, E. (2015). Willingness to Pay for VIP Latrines in Rural Senegal. Journal of Water, Sanitation and Hygiene for Development, 5(4), 586-593.
   DOI: 10.2166/washdev.2015.053.
- Hall, R. P., Vance, E., & van Houweling, E. (2015). <u>Upgrading Domestic-Plus Systems in Rural Senegal:</u> <u>An Incremental Income-Cost (I-C) Analysis</u>. *Water Alternatives*, 8(3): 317-336.
- Hall, R. P., Vance, E., & van Houweling, E. (2014). <u>The Productive Use of Rural Piped Water in Senegal</u>. *Water Alternatives*, 7(3), 480-498.
- Bryce, J., Flintsch, G., & Hall, R. P. (2014). <u>A Multi-Criteria Decision Analysis Technique for Sustainable Infrastructure Management Business Practices</u>. *Transportation Research Part D: Transport and Environment*, *32*, 435-445. DOI: 10.1016/j.trd.2014.08.019.
- Seiss, M., Vance, E., & Hall, R. P. (2014). <u>The Importance of Cleaning Data During Fieldwork: Evidence from Mozambique</u>. *Survey Practice*, 7(4), 1-11. DOI: 10.29115/SP-2014-0017.
- Hall, R. P. (2014). <u>Teaching Using Google Glass and Apps: Creating a platform to enable the fluid and continuous exchange of ideas and information</u>. *The Journal of Interactive Technology and Pedagogy*. Available at: <a href="https://jitp.commons.gc.cuny.edu/teaching-using-google-glass-and-apps/">https://jitp.commons.gc.cuny.edu/teaching-using-google-glass-and-apps/</a>
- Hall, R. P., van Koppen, B., & van Houweling, E. (2013). <u>The Human Right to Water: The Importance of Domestic and Productive Uses of Water</u>. *Science and Engineering Ethics*, *20*(4), 849-868. DOI: 10.1007/s11948-013-9499-3.
- van Houweling, E., Hall, R. P., Sakho Diop, A., Davis, J., & Seiss, M. (2012). <u>The role of productive</u> <u>water use in women's livelihoods: Evidence from rural Senegal</u>. *Water Alternatives* 5(3), 658-677.
- Ashford, N. A., Hall, R. P., & Ashford, R. (2012). <u>The Crisis in Employment and Consumer Demand:</u>
  <u>Reconciliation with Environmental Sustainability</u>. *Environmental Innovation and Societal Transitions*, 2, 1-22. DOI: 10.1016/j.eist.2012.01.002.
- Ashford, N. A. & Hall, R. P. (2011). <u>The Importance of Regulation-Induced Innovation for Sustainable</u> Development. *Sustainability*, *3*(1), 270-292. DOI: 10.3390/su3010270.
- Ramani, T. L., Zietsman, J., Gudmundsson, H., Hall, R. P., & Marsden, G. (2011). <u>Framework for Sustainability Assessment by Transportation Agencies</u>. *Transportation Research Record*, 2242(1), 9-18. DOI: 10.3141/2242-02.
- Burton, M. A. & Hall, R. P. (1999). <u>Asset Management for Irrigation Systems: Addressing the Issue of Serviceability</u>. *Irrigation and Drainage Systems*, *1*3(2), 145-163. DOI: 10.1023/A:1006295501430.

## **Book Chapters**

- Hall, R. P. & Ranganathan, S. (2021). Completing the cycle: An Inclusive Capitalism approach linking sustainable consumption and production. In <u>Sustainable Consumption and Production: Volume I</u>, pp. 65-84. Palgrave Macmillan. 10.1007/978-3-030-56371-4.
- Hall, R. P., Gudmundsson, H., Marsden, G., & Zietsman, J. (2014). <u>Sustainable Transportation</u>. <u>The Encyclopedia of Transportation</u>: <u>Social Science and Policy</u>, SAGE, pp. 1300-1305.

### **Book Reviews**

Hall, R. P. (2012). <u>Book Review. Cents and Sustainability: Securing Our Common Future by Decoupling Economic Growth from Environmental Pressures</u>. *Journal of Planning Education and Research*, 32, 240-242.

## Magazine Articles

- Hall R. P. & Ashford N. A. (2020). <u>Covid-19 Could Be an Opportunity to Combat Inequality</u>. Tribune Magazine, August 4, 2020.
- Ashford, N. A., Hall, R. P., & Ashford, R. (2012). <u>Addressing the Crisis in Employment and Consumer Demand: Reconciliation with Environmental and Financial Sustainability</u>. *The European Financial Review*, October-November, 2012, 63-68.
- Ashford, R., Hall, R. P., & Ashford, N. A. (2012). <u>Broadening Capital Acquisition with the Earnings of Capital as a Means of Sustainable Growth and Environmental Sustainability</u>. *The European Financial Review*, October-November, 2012, 70-74.
- Ashford, N. A. & Hall, R. P. (2012). <u>Regulation-Induced Innovation for Sustainable</u>

  <u>Development</u>. *Administrative & Regulatory Law News*, Spring 2012, *37*(3): 21-23.

## Research Reports

- Agnew, J., Mwangi, J., Hall, R. P., Sumner, D., & Kristofikova, N. (2022). The Impact of Blockchain Technology on Food Insecurity through African Indigenous Vegetables in Western Kenya: Final Report. USAID LASER PULSE, 73 pages. http://hdl.handle.net/10919/110444
- Majawa, F. & Hall, R. P. (2021). <u>Establishment of a data centre at Mzuzu University: A Survey of anticipations and aspirations of key project stakeholders</u>. *IASSIST Quarterly*, 45(3-4), pp. 1-13. DOI: 10.29173/iq999.
- Agnew, J., Mwangi, J., Hall, R. P., Sumner, D., & Kristofikova, N. (2021). Transaction and Information Pain Points in African Indigenous Vegetable Value Chains in Western Kenya: A Gender-Responsive AIV Value Chain and Market Analysis Report. USAID LASER PULSE, 09 Jul 2021, 47 pages.
- Hall, R. P., Ranganathan, S., Agnew, J., Christie, M. E., Clark, S., Kirk, G., Lucero, C. & Archibald, T. (2019). Virginia Tech Food Access and Security Study. Virginia Tech, Blacksburg, 43 pages. http://hdl.handle.net/10919/95218.
- van Houweling, E., Botta, R., Hall, R. P., Holm, R., Tembo, M., & Jenkins, M. (2017). Marion Medical Mission Shallow Well Evaluation. Submitted to Marion Medical Mission, November 2017, 40 pages.
- Hall, R. P., van Houweling, E., Polys, N., Wenzel, S., & Williams, P. (2015). Interdisciplinary Exploratory Research: Visualizing Water Services for Decision Making. Field Report. Submitted to the Institute for Society, Culture, and Environment, Virginia Tech, August 2015, 57 pages.

- Hall, R. P., van Houweling, E., Vance, E., Carzolio, M., & Davis, J. (2014). Evaluation of Eight Small-Scale Solar Systems in Cabo Delgado, Mozambique. Submitted to the Millennium Challenge Corporation, April 15, 2014, 51 pages.
- Hall, R. P., Davis, J., Vance, E., van Houweling, E., Carzolio, M., & Russel, K. (2013). Impact Evaluation Design and Implementation Report. Impact Evaluation of the Rural Water Activity in Nampula, Mozambique. Submitted to the Millennium Challenge Corporation, April 30, 2013, 35 pages.
- Hall, R. P. & Puckett, E. (2013). Analysis of TRB's Research Needs Statements (RNS) Database for Records Related to Sustainability, Virginia Tech, 22 pages.
- Hall, R. P. & Davis, J. (2012). Impact Evaluation of the Millennium Challenge Corporation-Supported Rural Water Supply Activity (RWSA) in Nampula, Mozambique. Mid-Term Report. Submitted to the Millennium Challenge Corporation, June 30, 2012, 94 pages.
- Hall, R. P., van Houweling, E., Vance, E., Hope, R., & Davis, J. (2011). Assessing the Link between Productive use of Domestic Water, Poverty Reduction, and Sustainability. Senegal Country Report. Submitted to the Water and Sanitation Program, World Bank, September 9, 2011, 95 pages.
- Davis, J., Hall, R. P., Hope, R., Marks, S., & van Houweling, E. (2011). Assessing the Link between Productive use of Domestic Water, Poverty Reduction, and Sustainability. Synthesis Report. Submitted to the Water and Sanitation Program, World Bank, September 9, 2011, 35 pages.

### **Short Bio**

Dr. Ralph Hall is an Associate Professor in the Urban Affairs and Planning (UAP) program at Virginia Tech and is the Associate Director of the School of Public and International Affairs (SPIA). He has over two decades of academic and professional experience in applying the concept of sustainable development to socio-technical systems with a specific emphasis on transportation systems in developed regions, and rural water supply and sanitation systems in developing regions. Dr. Hall has co-led two major research projects that studied the emerging concept of multiple-use water services (MUS) in Colombia, Senegal, and Kenya for the World Bank's Water and Sanitation Program (WSP), and evaluated a rural water program in Nampula, Mozambique, for the U.S. Millennium Challenge Corporation (MCC). Dr. Hall has also published two significant co-authored works on "Sustainable Transportation: Indicators, Frameworks, and Performance Management" (2015) and "Technology, Globalization, and Sustainable Development: Transforming the Industrial State" (2018). Dr. Hall is currently developing research agendas around new economics (with a focus on binary economics and community wealth building), food access and security at institutions of higher education, and the use of blockchain technology to improve food security in last-mile agricultural communities.

### **Professional Society Involvement**

Member of the Society of Socio-Economists, 2013-present.

Member of the Transportation Research Board (TRB) Committee on Transportation and Sustainability (ADD40), 2002-2020.

Member of TRB, 2002-2020.

## Journal Reviewer

BMC Public Health Environmental Earth Sciences Environmental Innovation and Societal Transitions Global Environmental Change Habitat International International Journal of Environmental Research and Public Health

International Journal of Water Resources Development

ISPRS International Journal of Geo-Information

Journal of Development Studies

Journal of Environmental Planning and Management

Journal of Urban Technology

Journal of Water, Sanitation and Hygiene for Development

Science and Engineering Ethics

Sustainability

**Transport Policy** 

Transportation Research Board Annual Meeting

Transportation Research Part D: Transport and Environment

Transportation Research Record

World Development

### **Courses**

UAP 1004 – Introduction to UAP Careers

UAP 1024 – Urban Public Issues

SPIA / GEOG 2244 – Sustainable Urbanization

UH 2984 – The Future of Work

UH 4514 – SuperStudio

UAP 4914 – SuperStudio: Senior Seminar in Public and Urban Affairs

UAP 5324 / BSE 4394 – Water Supply and Sanitation in Developing Countries

UAP 5764 – International Development Planning Studio

UAP 5784 – Technology, Globalization, and Sustainable Development

UAP 5854G – Advanced Urban Infrastructure Planning

SPIA 3954 – Study Abroad – Exploring the Global Food Challenge

UAP 4954/5954 – Study Abroad – Experience WASH in Malawi

SPIA 4954/5954 – *Study Abroad* – Sustainable Transitions in Employment, Economic Welfare, and the Environment, Pisa, Italy

#### Grants

- 2022 Center for Excellence in Teaching and Learning, Virginia Tech, "Bridge Experience Grant." PI, \$20,000.
- 2021 Student Opportunities and Achievement Resources Program (SOAR), Office of Undergraduate Research, Multicultural Academic Opportunities Program, College of Liberal Arts and Human Sciences, Institute for Society, Culture, and Environment (ISCE), and Fralin Life Sciences Institute, "F.I.R.E. (Forging Interest in Research and Engagement) Starters Program." Fellowship, \$5,000.
- 2021 Center for Communicating Science, Virginia Tech, "SciArt Collaboration Incubator Community Wealth Building." Co-PI, \$2,000.
- 2020 USAID Long-Term Assistance and Services for Research (LASER), Partners for University-Led Solutions Engine (PULSE), [USAID LASER PULSE], "Exploring the Use of Blockchain Technology to Improve Food Security Through African Indigenous Vegetables in Western Kenya." PI, \$236,849.

- 2019 School of Public and International Affairs/Urban Affairs and Planning Program License Grant, Virginia Tech, "UrbanFootprint." PI, \$3,000.
- 2019 Virginia Tech Office of Outreach and International Affairs (OIA) Grant, "VT Food Access and Security Study." Co-PI, \$10,000.
- 2019 Virginia Tech College of Science Grant, "VT Food Access and Security Study." Co-PI, \$5,000.
- 2018 Virginia Humanities Grant, "Addressing Inequality A one-day public humanities summit produced collaboratively by Virginia Tech and Virginia Union University, exploring Dr. Martin Luther King's vision of a "Beloved Community", its roots in the Civil Rights Movement, and its meaning in the present day." Co-PI, \$2,500.
- 2018 Global Systems Science Supplemental Grants (January and June), Virginia Tech, "Supplemental Funding Expanding the Mzuni-Virginia Tech Library Design Partnership to Include GSS-Related Research and Education Opportunities." PI, \$5,000.
- 2017 NSF Convergence HTF: RCN: "Enhancing small and mid-level farm viability through a systems-based research network: Linking technology and sustainable development and practice." See the <a href="HARVEST website">HARVEST website</a>. Steering Committee Member, \$499,748.
- 2017 Center for International Research Education and Development (CIDER) Grant, Virginia Tech, "Virginia Tech Food Access and Security Study." Co-PI, \$7,025.
- 2017 Global Systems Science Seed Grant, Virginia Tech, "Expanding the Mzuni-Virginia Tech Library Design Partnership to Include GSS-Related Research and Education Opportunities." PI, \$8,000.
- 2017 Virginia Tech Grant, "Beloved Community Initiative." PI, \$30,000.
- 2017 Office of General Education, Virginia Tech, "Sustainable Urbanization Pathways Course Development Grant." Co-PI, \$10,000.
- 2015-2016: ISCE, Virginia Tech, "Interdisciplinary Exploratory Research: Visualizing Water Services for Community Decision Making." PI, \$35,000.
- 2015 Global Education Office, Virginia Tech, "Curriculum Globalization Grant." PI, \$3,500.
- 2013-2015: Center for Innovation in Learning, Virginia Tech, "Peering into the Black Box of Learning via Cognitive Life Logging," Google Glass. PI, \$10,000.
- 2012-2015: University Grants Commission, India, "Creating an International Program for Sustainable Infrastructure Development between the Indian Institute of Technology in Kanpur (IITK) and VT." PI, \$476,442.
- 2012-2014: AdvanceVT, Virginia Tech, "Mentoring micro-grant to work with Prof. Robert Ashford." PI, \$1,500.
- 2010-2013: Millennium Challenge Corporation, "Impact Evaluation of the Millennium Challenge Corporation-supported Rural Water Investment in Nampula, Mozambique." Co-PI, \$814,235.
- 2009-2010: National Cooperative Highway Research Program (NCHRP), "Sustainability Performance Measures for State Departments of Transportation and Other Transportation Agencies." Senior Advisor, \$10,000.
- 2007-2010: Water and Sanitation Program (WSP), World Bank, "Assessing the Link between Productive Use of Domestic Water, Poverty Reduction, and Sustainability (Colombia, Senegal, and Kenya)." Postdoc (2007-2008, Stanford University) / Co-PI (2009-2010, VT), \$710,000.

### Awards

- 2021 Inclusive Leadership Award, Leadership and Social Change Residential College (LSCRC), Virginia Tech
- 2016 Certificate of Appreciation "For Excellent Work on Committee Outreach" (Awarded by the Transportation Research Board of the National Academies)
- 2015 Outstanding Dissertation Advisor Award in Social Sciences, Business, Education, and Humanities, Virginia Tech

- 2015 Certificate of Appreciation "For Conducting the Baseline Work with Identifying All Committees with a Perspective on Sustainability" (Awarded by the Transportation Research Board of the National Academies)
- 2014 Certificate of Appreciation "For Outstanding Service as Research Coordinator for the Committee on Transportation and Sustainability (ADD40)" (Awarded by the Transportation Research Board of the National Academies)
- 2013 Excellence in Scholarship Award from the College of Architecture and Urban Studies (CAUS), Virginia Tech
- 2012 Green Book Festival Winner Best Business Book: Technology, Globalization and Sustainable Development: Transforming the Industrial State Dr. Nicholas A. Ashford and Dr. Ralph P. Hall
- Lærebogsprisen, 2010 Special award for a "strong international textbook project" (National Award Denmark)
- UTC Outstanding Student Award (Regional Award USA), 2006, New England University Transportation Center

UTC Research Grant, 2004

CUTC Wootan Award for Research in the Area of Transportation Policy and Planning (National Award – USA), 2003

Student Excellence and Leadership Award, TPP, MIT, 2002

Best Thesis Award, TPP, MIT, 2002

Martin Family Society of Fellows for Sustainability Research Scholarship, MIT, 2002

The Institute of Civil Engineers (ICE) QUEST Scholarship (2-year duration), 2000

ICE award for the Best Civil Engineering Graduate in the South of England, 1999

The Royal Academy of Engineering (RAE) International Research Grant, 1999

The Science, Engineering & Technology Student of the Year Award for Best Civil Engineering Student (National Award – UK), 1998

RAE Leadership Scholarship (3-year duration), 1997

RAE Individual Plans Scholarship, 1996

Halcrow Group University Sponsorship (4-year duration), 1995

# **Publications Listed by Area of Expertise**

# WASH / Multiple Use Water Services / Human Right to Water

#### Peer-reviewed Articles

- GC, R. K., Hall, R. P., & Hammett, A. L. (2021). Thinking beyond domestic water supply: approaches to advance multiple-use water systems (MUS) in the rural hills of Nepal. Water International, 47(1), 92-113. DOI: 10.1080/02508060.2021.1966976.
- Holm, R. H., Hall, R. P., Muthukrishnan, S., Munthali, T., & Sinda, M. (2021). Promoting multiple-use water services by leveraging existing rural water supply and smallholder farmer groups, Malawi. *International Journal of Water Resources Development*, *37*(2), 321-338. DOI: 10.1080/07900627.2020.1765745.
- GC, R. K., Ranganathan, S., Hammett, A. L., & Hall, R. P. (2020). What factors determine the technical performance of community-managed rural water systems in the middle hills of Nepal? Journal of Water, Sanitation and Hygiene for Development, 11(2), 222-230. DOI: 10.2166/washdev.2020.189.
- GC, R. K. & Hall, R. P. (2020). <u>The Commercialization of Smallholder Farming—A Case Study from the Rural Western Middle Hills of Nepal</u>. *Agriculture*, *10*(5), 143. DOI: 10.3390/agriculture10050143.
- Domínguez, I., Oviedo-Ocaña, E. R., Hurtado, K., Barón, A., & Hall, R. P. (2019). <u>Assessing Sustainability in Rural Water Supply Systems in Developing Countries Using a Novel Tool Based on Multi-Criteria Analysis</u>. *Sustainability*, *11*(19), 5363. DOI: 10.3390/su11195363. Supplementary material.
- GC, R. K., Ranganathan, S., & Hall, R. P. (2019). <u>Does Rural Water System Design Matter? A Study of Productive Use of Water in Rural Nepal</u>. *Water*, *11*(10), 1978. DOI: 10.3390/w11101978.
- Stedman, S., Mnyimbiri, A. M., Kawonga, Z., Malota, M., Njera, D., Hall, R. P., & Holm, R. (2018).

  <u>Using irrigation to kick-start multiple-use water services for small-scale farmers in Malawi: A case study of the Nkhata Bay District</u>. *Irrigation and Drainage*, 67(5), 645-653. DOI: 10.1002/ird.2282.
- Hall, R. P., Ranganathan, S, & GC, R. K. (2017). <u>A General Micro-level Modeling Approach to Analyzing Interconnected SDGs: Achieving SDG 6 and More through Multiple-Use Water Services (MUS)</u>. *Sustainability*, 9(2), 314. DOI: 10.3390/su9020314.
- Chirwa, C. F. C, Holm, R. H., Hall, R. P., Krometis, L-A, H., Vance, E., Edwards, A., & Guan, T. (2017). Pit latrine fecal sludge resistance using a dynamic cone penetrometer in low income areas in Mzuzu city, Malawi. International Journal of Environmental Research and Public Health, 14(2), 87. DOI: 10.3390/ijerph14020087.
- van Houweling, E., Hall, R. P., Carzolio, M., & Vance, E. (2016). My neighbor drinks clean water, while I continue to suffer;" an analysis of the intra-community and intra-household impacts of a rural water project in Mozambique. Journal of Development Studies, 53(8), 1147-1162. DOI: 10.1080/00220388.2016.1224852.
- Hall, R. P., van Houweling, E., Huang, W., & Vance, E. (2015). <u>Willingness to Pay for VIP Latrines in Rural Senegal</u>. *Journal of Water, Sanitation and Hygiene for Development*, *5*(4), 586-593. DOI: 10.2166/washdev.2015.053.
- Hall, R. P., Vance, E., & van Houweling, E. (2015). <u>Upgrading Domestic-Plus Systems in Rural Senegal:</u>
  An Incremental Income-Cost (I-C) Analysis. *Water Alternatives*, 8(3): 317-336.
- Hall, R. P., Vance, E., & van Houweling, E. (2014). <u>The Productive Use of Rural Piped Water in Senegal</u>. *Water Alternatives*, 7(3), 480-498.

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