

# **ROSAMOND LEE NAYLOR**

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## **EDUCATION**

- |      |  |
|------|--|
| 1989 | Stanford University, Stanford, California<br>Ph.D. in Applied Economics  |
| 1981 | London School of Economics, London, England<br>Master of Science in Economics  |
| 1980 | University of Colorado, Boulder, Colorado<br>Bachelor of Arts in Economics, Magna Cum Laude<br>Bachelor of Arts in Environmental Science |

## **PROFESSIONAL HONORS AND AWARDS**

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| 1/99      | Aldo Leopold Leadership Fellow in Environmental<br>Science and Public Policy |
| 6/94      | Pew Fellow in Conservation and the Environment                               |
| 7/90-9/91 | McNamara Post-doc Fellowship, The World Bank                                 |

## **EXPERIENCE**

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| 12/14-present | William Wrigley Professor, Department of Earth System Science,<br>Stanford University  |
| 9/09-12/14    | Professor, Department of Earth System Science, Stanford University   |
| 9/09-present  | Professor by courtesy, Department of Economics, Stanford University  |
| 6/05-present  | Director, Center on Food Security and the Environment, Stanford<br>University  |
| 9/07-12/14    | William Wrigley Senior Fellow, Freeman-Spogli Institute for<br>International Studies and the Woods Institute for the Environment,<br>Stanford University |
| 9/92-5/09     | Director of Studies, Goldman Interschool Honors Program in<br>Environmental Science, Technology, and Policy, Stanford University                         |

9/00-8/09	Associate Professor by courtesy, Department of Economics, Stanford University
9/00-8/07	Julie Wrigley Senior Fellow, Center for Environmental Science and Policy at the Freeman Spogli Institute for International Studies, Stanford University

Naylor has been employed by Stanford University's Institute for International Studies since 1990. Between September 1990 and August 2000, she advanced from Research Associate to Senior Fellow with academic council status. She also advanced from Lecturer to Associate Professor (by courtesy) in Economics and in 2009 was named a Professor of Earth Systems Science in the School of Earth, Energy, and Environmental Sciences and a Professor (by courtesy) in Economics.

## PUBLICATIONS

Byerlee, D., Falcon, W., & Naylor, R. (2016) *The Tropical Oil Crops Revolution: Managing Tradeoffs Among Food, Farmers, Fuels, and Forests*. New York, NY: Oxford University Press (forthcoming).

Naylor, R. L. (2016). Food security in a commodity driven world. *Journal of Global Food Security* (forthcoming).

Higgins, M. and R. Naylor (2016). The political economy of biodiesel in an era of low oil prices. Center on Food Security and the Environment, Stanford University (in prep.)

Cao, L., Naylor, R., Henriksson, P., Leadbitter, D., Metian, M., Troell, M., & Zhang, W. (2015). China's aquaculture and the world's wild fisheries. *Science*, 347(6218), 133-135.

Alaofe, H, Burney, J., Naylor, R., and Taren, D. (2016). Solar-powered drip irrigation impacts on crop production diversity and dietary diversity in Northern Benin. *Food and Nutrition Bulletin* (forthcoming).

Naylor, R. L. (2015). A global perspective on food systems. *Journal of Agriculture, Food Systems, and Community Development*, 5(2) (Winter), ISSN 2152-0801 (online).

Naylor, R. L. (2015). "The tree of life", in Holten, K. (Ed.), *About Trees*. Broken Dimanche Press: 131-133.

Naylor, R. L. (Ed.). (2014). *The Evolving Sphere of Food Security*. New York, NY: Oxford University Press.

Falcon, W., & R. Naylor, R. (Eds.). (2014). *Frontiers in food policy: Perspectives on sub-Saharan Africa*. Stanford University: Center on Food Security and the Environment. Published by CreateSpace (Amazon).

Troell, M., Naylor, R., Metian, M., Beveridge, M., Tyedmers, P., Folke, C., . . . de Zeeuw, A. (2014). Does aquaculture add resilience to the global food system? *PNAS*, 111(37), 13257-13263.

Naylor, R. L. (2014). Biofuels, rural development, and the changing nature of agricultural demand. In W. Falcon & R. Naylor (Eds.), *Frontiers in food policy: Perspectives on sub-Saharan Africa* (343-376). Stanford University: Center on Food Security and the Environment. Published by CreateSpace (Amazon).

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- Garrett, R. D., Lambin, E. F., & Naylor, R. L. (2013). The new economic geography of land use change: Supply chain configurations and land use in the Brazilian Amazon. *Land Use Policy*, 34, 265-275.
- Liu, J., Hull, V., Batistella, M., DeFries, R., Dietz, T., Fu, F., . . . Zhu, C. (Including Naylor, R. L.) (2013). Framing sustainability in a telecoupled world. *Ecology and Society* 18(2). Retrieved from <http://www.ecologyandsociety.org/vol18/iss2/art26/>
- Klinger, D., & Naylor, R. L. (2012). Searching for solutions in aquaculture: Charting a sustainable course. *Annual Review of Environment and Resources*, 37, 247-276.
- Garrett, R. D., Lambin, E. F., & Naylor, R. L. (2013). Land institutions and supply chain configurations as determinants of soybean planted area and yields in Brazil. *Land Use Policy*, 31, 385-396.
- Naylor, R. L., & Falcon, W. P. (2011). The global costs of American ethanol. *The American Interest*, 7(2), 66-76.
- Matson, P., Naylor, R., & Ortiz-Monasterio, I. (2011). Looking for win-wins in intensive agriculture. In P. A. Matson (Ed.), *Seeds of Sustainability: Lessons from the Birthplace of the Green Revolution in Agriculture* (31-46). Washington, DC: Island Press.
- Naylor, R., & Falcon, W. (2011). The Yaqui Valley's agricultural transition to a more open economy. In P. A. Matson (Ed.), *Seeds of Sustainability: Lessons from the Birthplace of the Green Revolution in Agriculture* (107-138). Washington, DC: Island Press.
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- Naylor, R. L. (2011). Expanding the boundaries of agricultural development. *Journal of Food Security*, 3, 233-251.
- Burney, J. A., & Naylor, R. L. (2011). Smallholder irrigation as a poverty alleviation tool in the Sub-Saharan Africa. *World Development*, 40(1), 110-123.
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Naylor, R. N., Battisti, D. S., Vimont, D. J., Falcon, W. P., & Burke, M. B. (2007). Assessing risks of climate variability and climate change for Indonesian rice agriculture. *PNAS*, 104(19), 7752-7757.

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Naylor, R., & Matson, P. (1993). Food, conservation, and global environmental change: Is compromise possible? *EOS Transactions*, 74(15), 178-179.

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Naylor, R. (1992). Labor-saving technologies in the Javanese rice economy: Recent developments and a look into the 1990s. *Bulletin of Indonesian Economic Studies*, 28(3), 71-91.

Naylor, R. (1991). The rural labor market in Indonesia. In S. R. Pearson et al. (Eds.), *Rice Policies in Indonesia* (58-98). Ithaca, NY: Cornell University Press .

Naylor, R., "Equity Effects of Alternative Rice Policies. In S. R. Pearson et al. (Eds.), *Rice policies in Indonesia* (138-161). Ithaca, NY: Cornell University Press.

Pearson, S., Naylor, R., & Falcon, W. (1991). Recent policy influences on rice production. In S. R.. Pearson et al. (Eds.), *Rice policies in Indonesia* (8-21). Ithaca, NY: Cornell University Press.

Naylor, R. (1990). Wage trends in rice production on Java: 1976-1988. *Bulletin of Indonesian Economic Studies*, 26(2), 133-156.

Naylor, R. (then Lee, R.), Lillydahl, J., & Singell, L. (1981). Youth Unemployment and the Minimum Wage. *Annals of Regional Science*.

## STANFORD COURSES

**The World Food Economy:** Departments of Economics and Earth Systems Science (cross-listed), undergraduates and graduates, survey course on agricultural demand, supply, and trade theory; food security; food policy (Economics 106/206).

**Human Society and Environmental Change:** Departments of Earth Systems Science and History (cross-listed), core course on human-environment interactions (Anthrosphere) (ES112/History 103D).

**Food and Security:** sophomore seminar integrating concepts of food security and international security as more traditionally defined (ES 61Q/EESS 61Q/INTNLREL 61Q).

**The Evolving Sphere of Food Security:** graduate and upper-level undergraduate seminar on global food security, modeled after the volume by R. L. Naylor (ed.) 2014. (ES168/268)

**Goldman Interschool Honors Program in Environmental Science, Technology, and Policy:** Center for Environmental Science and Policy, undergraduates, students selected competitively (IIS 195). Directed the program from 1994-2008. This program entails a yearlong seminar with 8-12 undergraduate students selected competitively from all schools and departments. A high percentage of Goldman alumni remain in continuous contact, and an unusual number of theses from the program are published in the peer-reviewed literature.

## GRADUATE ADVISING

Advisees who have completed PhD degrees:

David Lobell (Geological and Environmental Sciences)

Amy Luers (E-IPER)

Josh Goldstein (E-IPER)

Kirsten Oleson (E-IPER)

Geoff Shester (E-IPER)

Joanne Gaskell (E-IPER)

Kaitlin Shilling (E-IPER)

Rodrigo Pizarro (E-IPER)

Kristen Honey (E-IPER)

Rachel Garrett (E-IPER)

Dane Klinger (E-IPER)

Andy Gerhart (E-IPER)

Current PhD advisees:

Katrina ole-MoiYoi (E-IPER)

Casey Maue (E-IPER)

Tannis Thorlakson (E-IPER)

Sudatta Ray (E-IPER)

Elsa Ordway (Earth Systems Science)

Ju Young Lee (Earth Systems Science)

## UNIVERSITY SERVICE

2013-2014	Faculty Representative, Advisory Panel on Investment Responsibility and Licensing (APIR-L), Stanford University
2008 – present	Member, Executive Committee, Earth Systems Science Program
2006 – present	Member, Faculty Steering Committee, International Policy Studies Program
Ongoing	Undergraduate advisor in Earth Systems, International Relations, and Human Biology
2008 –2012	Member, Advisory Committee, E-IPER
2004 – 2009	Environmental Ventures Program, Woods Institute for the Environment (Co-Chair, 2004-2006; member 2007-2009)
Various years	Admissions Committee, E-IPER PhD Program
Various years	Member of numerous search committees in the Department of Earth Systems Science, Freeman Spogli Institute for International Studies, and the Stanford Woods Institute for the Environment

## **EXTERNAL SERVICE - MEMBERSHIPS**

2015 – present	Member, Scientific Advisory Board, Institute for Food and Agricultural Literacy (IFAL), University of California-Davis World Food Center
2013 – 2015	Science Advisor, United Nation’s Secretary General Ban Ki Moon’s initiative on Sustainable Development (Sustainable Agriculture section)
2012 – present	Trustee, The Nature Conservancy, California Chapter
2012 – present	Member, Scientific Advisory Board, Aldo Leopold Leadership Program
2011 – present	Member, Advisory Board, Aspen Global Change Institute
2011 – 2017	Member, Scientific Board of the Beijer Institute, Stockholm
2011 – 2012	Member, Advisory Panel for the African Human Development Report at UNDP (United Nations Development Program)
2009 – 2011	Member, U.S. National Committee for the Pacific Science Association, National Academy of Sciences
2007 – 2010	Member, Pew Fellows Advisory Committee
2005 – 2009	Member, Selection Committee, Aldo Leopold Leadership Program
2005 – 2009	Member, Scientific Advisory Board, COMPASS (Communication Partnership for Science and the Sea)
1998 – 2007	Member, Oversight Committee for the Collaborative Crop Improvement Program, McKnight Foundation
2006	Judge, Risser Environmental Journalism Prize for the American West
2003 – 2005	Member, NRC Committee on “Alaska Yukon Salmon: Research and Restoration Priorities”. National Academy of Sciences

## **EXTERNAL SERVICE - EDITORIAL**

2012 – present	Associate Editor, <i>Journal of Food Security</i>
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2011 – present                      Editorial Advisory Board, *Global Food Security*

2009 – present                      Editorial Board, *Aquaculture Environment Interactions*

2007 – 2011                         Editorial Board, *Environmental Research Letters*

2004 – 2008                         Editorial Board, *Annual Review of Environment and Resources*

Frequent reviewer for *Science, Nature, PNAS, Food Policy, Global Environmental Change*