

Faculty Profile: David Roland-Holst



David Roland-Holst -
Adjunct Professor -

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David Roland-Holst joined the faculty of the agricultural and resource economics department at UC Berkeley as an adjunct professor in August 2004. He holds a Ph.D. in economics from UCB, where his original fields were development and mathematical economics. Prior to joining ARE, David taught at Mills College, and he maintains his position as a Professor of Economics. One of the world's leading experts on policy modeling, he has extensive research experience in economics related to environment, development, agriculture, and international trade, authoring three books and over 100 articles in professional journals and books. David has served in academic posts in Asia, Europe, and the United States. He has conducted research in over 40 countries, working with many public institutions including a variety of federal and state agencies, the Asian Development Bank, Inter-American Development bank, Organization for Economic Cooperation and Development (OECD), World Bank, several United Nations agencies, and governments in Asia, Latin America, Europe, and the United States.

David's current research spans a diverse set of topics including climate policy, biofuel, China's development, infrastructure/development linkages, and avian influenza.

His empirical work made an important contribution to the legislative process leading up to California's path-breaking Global Warming Solutions Act. Results of his analysis were quoted in the Governor's executive order establishing the Act, and he has since produced a series of reports on the state's prospects for transition to a regime of market-based greenhouse gas targeting. As a member of the Energy Biosciences Initiative, David is leading research into the influence of biofuel policy and technology on sustainable food and fuel supplies in developing countries. In Southeast Asia, he is working with several graduate students on a regional biofuel atlas and household surveys of rural energy use.

David has researched China's economic emergence since the early 1990's, visits the country several times a year, and teaches UCB's main course on the Chinese economy. Recently, his work has focused on China's energy economy, its structural change, and prospects for sustainability. China's pivotal role in global food markets and climate negotiations are also among his active research interests.

At the instance of the Asian Development Bank (ADB), David agreed to establish a research program on the role of infrastructure and economic development. A leading priority for ADB is Asian regional integration, and unprecedented commitments to infrastructure investment are now being made to facilitate this. Like globalization, infrastructure has an intuitive link to aggregate growth, yet its detailed influence on livelihoods, particularly among the region's poor majorities, is not well understood. To

elucidate these linkages, David has established a set of eight infrastructure development goals, combined with dozens of metrics to assess progress toward them, that will help ADB and others direct investment resources in ways that are more socially effective.

Finally, David is managing a global research program for FAO on pro-poor livestock policy, with special reference to Highly Pathogenic Avian Influenza (HPAI). Poultry raising is an essential source of nutrition and yields important income for the rural poor across Asia, and the advent of HPAI threatens to displace these producers. David and several colleagues and students are working in Southeast Asia with public health experts to improve smallholder biosecurity and help them achieve sustainable market participation.

Teaching remains one of the most satisfying dimensions of David's academic life, and he regularly takes over large upper division courses on trade, development, and China. "Of course it's exciting to contribute to important policy issues, but I also feel fortunate to bring these insights to my students. For example, reconciling economic and environmental aspirations will be the defining challenge of their generation, and I want them to remember we prepared them for the world they will live in. It will be a changed world, and a world where traditions of affluence and hierarchy will have to change. I tell my students they need not give up their aspirations, but they will have to innovate even more than we have to fulfill them. To sustain the hopes of a larger and more inclusive world economy, we must innovate in resource use, in social awareness, and ultimately in the ethical conduct that offers a means for us to share prosperity."