



# UNIVERSITY OF THE PHILIPPINES SCHOOL OF ECONOMICS

and

# PCED

Philippine Center for  
Economic Development

present a seminar on

## Climate Change, Dengue and the Economy: Ascertaining the Link Between Dengue and Climatic Conditions

by

**Dr. Agustin L. Arcenas**

**22 January 2016, Friday**

4:00-5:00 p.m. – Room 303

### **Abstract:**

This paper examines the climate-change related factors that affect the incidence of dengue in the Philippines. Dengue, one of the most high-profile public health problems in Southeast Asia, has been estimated to cost hundreds of millions of dollars worldwide in terms of treatment, surveillance and control, lost income and other indirect costs per year. The disease has been a burden on the public, especially the poor who are less able to access funds for treatment and more heavily affected by the loss in income due to illness.

The findings indicate that temperature, precipitation and the incidence of La Niña significantly contribute to the incidence of dengue in the Philippines by enhancing the breeding, growth and development of the *Aedes aegypti*, the dengue-carrying mosquito variety. The econometric results also indicate that household sanitation practices also affect dengue incidence. The results of the study are consistent with the findings of studies regarding dengue in other parts of the world, and contribute to the growing awareness about the health impacts of climate change. This study should provide Philippine policy-makers some guidance in addressing the dengue problem as climate change becomes more pronounced.

### **About the speaker:**

Dr. Agustin L. Arcenas is an Associate Professor at the U.P. School of Economics. He earned his Ph.D. in Agricultural Economics specializing in Environmental and Natural Resource Economics at Michigan State University in East Lansing, MI and his M.S. in Applied Economics at the University of Wisconsin in River Falls, WI, both in the United States. He is an alumnus of the U.P. School of Economics, graduating with a BA Economics degree with honors.



Before joining the School of Economics ten years ago, Dr. Arcenas was a member of the Policy and Economics Team (PET) as consultant and Environmental Economist in the (then) Environment Department of the World Bank in Washington, D.C. (USA) from 2003-2005, working on the poverty impacts of payments for environmental services (PES) in Nicaragua, Guatemala, Columbia and El Salvador. Since moving back to the Philippines in 2005, he has worked on and written about various environmental and natural resource issues both in the Philippines and abroad, including water and air pollution, climate change, water demand estimation, environmental health, mining, and waste and sanitation. He has also advised the Philippine government on various environmental and natural resource issues such as raw water pricing, protected area financing and management, emission reduction and climate change.

**Free and open to the public**

For group attendance, please contact Ms. Gloria Lambino, UPSE Economics Research Center  
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