

Has climate change driven urbanization in Africa?

J. Vernon Henderson, Adam Storeygard, Uwe Deichmann



PII: S0304-3878(16)30067-0  
DOI: <http://dx.doi.org/10.1016/j.jdeveco.2016.09.001>  
Reference: DEVEC2093

To appear in: *Journal of Development Economics*

Received date: 16 September 2015  
Revised date: 31 August 2016  
Accepted date: 2 September 2016

Cite this article as: J. Vernon Henderson, Adam Storeygard and Uwe Deichmann, Has climate change driven urbanization in Africa?, *Journal of Development Economics*, <http://dx.doi.org/10.1016/j.jdeveco.2016.09.001>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting galley proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

**Has climate change driven urbanization in Africa?**

J. Vernon Henderson, London School of Economics

Adam Storeygard, Tufts University

Uwe Deichmann, World Bank\*

August 29, 2016

**Abstract**

This paper documents strong but differentiated links between climate and urbanization in large panels of districts and cities in Sub-Saharan Africa, which has dried substantially in the past fifty years. The key dimension of heterogeneity is whether cities are likely to have manufacturing for export outside their regions, as opposed to being exclusively market towns providing local services to agricultural hinterlands. In regions where cities are likely to be manufacturing centers (25% of our sample), drier conditions increase urbanization and total urban incomes. There, urban migration provides an "escape" from negative agricultural moisture shocks. However, in the remaining market towns (75% of our sample), cities just service agriculture. Reduced farm incomes from negative shocks reduce demand for urban services and derived demand for urban labor. There, drying has little impact on urbanization or total urban incomes. Lack of structural transformation in Africa inhibits a better response to climate change.

**Keywords:** Africa, Urbanization, Climate Change**JEL Codes:** O10, O55, Q54, R12

\* J.V.Henderson@lse.ac.uk, Adam.Storeygard@tufts.edu, Udeichmann@worldbank.org. The authors thank Nat Tharnpanich, Marine Gassier, Kofi Acquah, Kevin Proulx, and Louise Bernard for research assistance, and Deborah Balk, Ram Fishman, Doug Gollin, Margaret McMillan, Mark Roberts, Matt Turner, and seminar participants at Barcelona, Berkeley, Brown (CURE meetings), Columbia, CUNY Institute for Demographic Research, Edinburgh, GWU, LSE, LSU, Tufts, UC-Irvine, Williams, the World Bank, the Population Association of America, Urban Economic Association, and American Real Estate and Urban Economics Association meetings, and the conference "Urbanization In Africa: Trends, Promises And Challenges" for helpful comments and suggestions. We are indebted to Alexander Moradi for pointing us to the Oxford Regional Economic Atlas, Africa (1965) for data on early industrialization in Africa, as well as for helpful comments on an earlier version of the paper. We gratefully acknowledge the support of the World Bank's Knowledge for Change Program and a Global Research Program on Spatial Development of Cities funded by the Multi Donor Trust Fund on Sustainable Urbanization of the World Bank and supported by the UK Department for International Development. The findings, interpretations, and conclusions expressed in this paper are entirely those of the authors. They do not necessarily represent the views of the International Bank for Reconstruction and Development/World Bank and its affiliated organizations, or those of the Executive Directors of the World Bank or the governments they represent. Storeygard acknowledges support from Award Number T32HD007338 from the Eunice Kennedy Shriver National Institute of Child Health and Human Development.

Download English Version:

<https://daneshyari.com/en/article/5094294>

Download Persian Version:

<https://daneshyari.com/article/5094294>

[Daneshyari.com](https://daneshyari.com)