

1-1-1979

# Agricultural Systems in East Africa Viewed from Landsat

Tina K. Cary

Follow this and additional works at: [http://docs.lib.purdue.edu/lars\\_symp](http://docs.lib.purdue.edu/lars_symp)

---

Cary, Tina K., "Agricultural Systems in East Africa Viewed from Landsat" (1979). *LARS Symposia*. Paper 312.  
[http://docs.lib.purdue.edu/lars\\_symp/312](http://docs.lib.purdue.edu/lars_symp/312)

This document has been made available through Purdue e-Pubs, a service of the Purdue University Libraries. Please contact [epubs@purdue.edu](mailto:epubs@purdue.edu) for additional information.

Reprinted from

**Symposium on**

**Machine Processing of**

**Remotely Sensed Data**

**June 27 - 29, 1979**

The Laboratory for Applications of  
Remote Sensing

Purdue University  
West Lafayette  
Indiana 47907 USA

IEEE Catalog No.  
79CH1430-8 MPRSD

Copyright © 1979 IEEE  
The Institute of Electrical and Electronics Engineers, Inc.

Copyright © 2004 IEEE. This material is provided with permission of the IEEE. Such permission of the IEEE does not in any way imply IEEE endorsement of any of the products or services of the Purdue Research Foundation/University. Internal or personal use of this material is permitted. However, permission to reprint/republish this material for advertising or promotional purposes or for creating new collective works for resale or redistribution must be obtained from the IEEE by writing to [pubs-permissions@ieee.org](mailto:pubs-permissions@ieee.org).

By choosing to view this document, you agree to all provisions of the copyright laws protecting it.

# AGRICULTURAL SYSTEMS IN EAST AFRICA VIEWED FROM LANDSAT

TINA K. CARY

Columbia University, Department of Geography and Goddard Institute for Space Studies

Landsat digital data are being analyzed to examine traditional agricultural systems in a remote region in West Pokot District in northwestern Kenya. The computer-aided analysis incorporates ground observations, made during the period December 1977 - September 1978, in addition to maps and aerial photographs. The study area was selected to extend earlier work in Tamkal Valley (Conant and Cary 1977) to include a flatland area to the north, where cropping is more continuous than in the valley and irrigation is practiced. Differences in distribution of active cultivation between the shifting cultivation system of the valley and the irrigated system of the flatlands are being investigated. Preliminary results indicate that computer-aided analysis makes possible the examination and comparison of spatio-spectral variations in these agricultural systems.

---

Conant, Francis P., and Cary, Tina K. "A First Interpretation of East African Swiddening Via Computer-Assisted Analysis of 3 Landsat Tapes". Proceedings, Symposium on Machine Processing of Remotely Sensed Data, June 21-23, 1977, pp. 36-43. West Lafayette, Indiana: Laboratory for Applications of Remote Sensing.

Field work was funded by NSF Grant No. BNS 77-15622 to Prof. Francis P. Conant, Department of Anthropology, Hunter College, NYC. Data analysis was supported by NASA Grant NSG 5080 to Dr. Samuel N. Goward, Department of Geography, Columbia University, NYC.