Forest Cover and Human Health Outcomes in Malawi

Kiersten Johnson, ICF Macro Intl - Demographic & Health Surveys
Anila Jacob, USAID - Consultant
Molly Brown, NASA Goddard Space Flight Center

Healthy forests provide human communities with ecosystem services including food, clean water and fuel, the loss of which is seen as a significant barrier to achieving the Millennium Development Goals. To investigate the impacts of deforestation on human health, 2010 Malawi DHS data linked to NASA's satellite remote-sensing data on forest cover was analyzed. Logistic regression was used to analyze associations between forest cover and childrens' dietary diversity, consumption of vitamin A-rich foods, diarrheal disease, and stunting, controlling for age, water source, sanitation, mother's education, wealth, NDVI, and migration. Children in areas with a net decadal loss of forest cover had a 19% decrease in dietary diversity and a 29% decrease in consumption of vitamin A-rich foods. Children living in communities with greater forest cover demonstrated a 34% decrease in the risk of experiencing diarrhea. The results suggest a protective effect of forest cover on select nutrition and health outcomes.

To the Chair of Session 806, Population and Environment:

We would very much like to submit our paper to your session at PAA, and we do have a complete draft prepared. However, we are not yet allowed to upload the full draft due to USAID's clearance procedures.

We expect the abbreviated version of our paper to be cleared by October 15, at which point we will submit it to you, while recognizing that it may in fact be too late to consider for inclusion in your session.

We apologize for any inconvenience, and appreciate your consideration.

Best regards,
Kiersten Johnson