

# HUMAN DEVELOPMENT AFRICA - 2013 Selected Indicators

The objective of this project is to examine the relationship between life expectancy at birth (LE) and gross national income per capita (GNI) in Africa, 2013. These socio economic indicator are used by the United Nations to evaluate the level of human development in a country. The African continent has been selected as the study area because it is the least developed region in the world. No assumption is made about causality between these two variables.

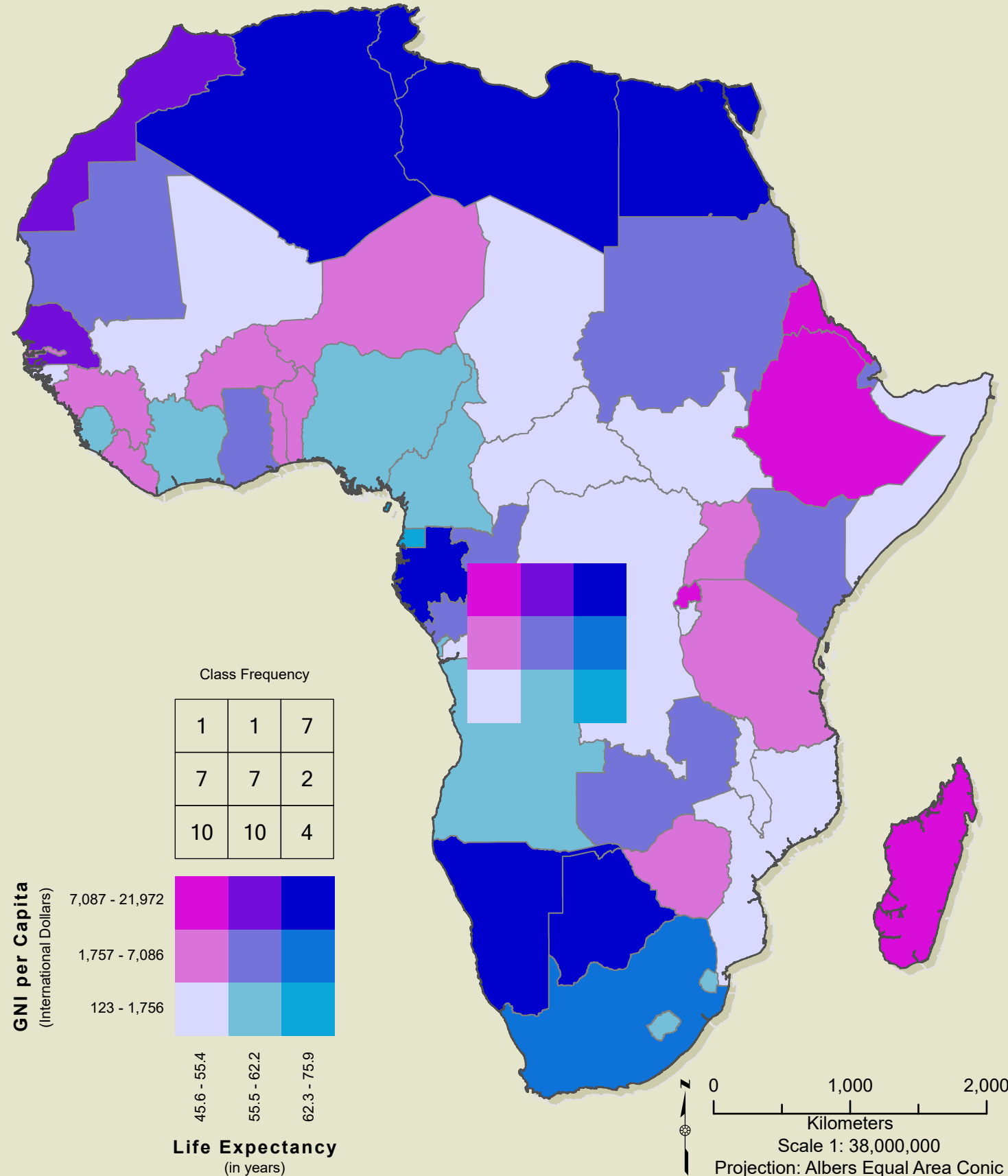
The relationship between these two variables is not strong and it can be described as weak to moderate, based on a positive correlation coefficient ( $r$ ) of 0.44. The arithmetic mean for LE is 58.8 and 51% of the countries are below this average. Based on the classification method used in the main map, 37% of all countries are in the lower class, 37% are in the middle class and 26% are in the higher class. The values in this variable are more or less evenly distributed amongst the classes and the Skewness is relatively low (0.53).

By contrast, the mean for GNI is \$4,421 and 71% of the countries are below this average. 49% of all countries are in the lower class, 33% are in the middle class, and 18% are in the higher class. The distribution of values in this variable is fairly asymmetrical with relatively high Skewness (1.97).

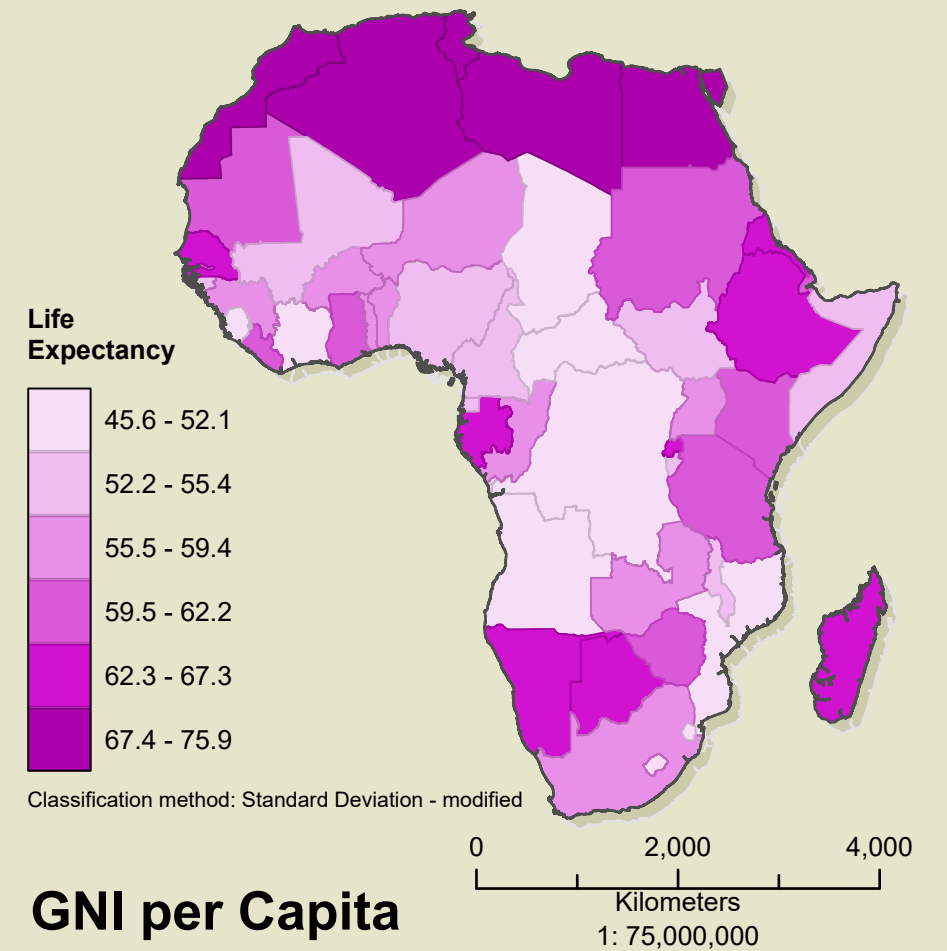
The nature of the relationship between these two variables can be further explored by examining the maps on this layout.

Source: United Nations Development Programme, Human Development Reports  
 URL: <http://hdr.undp.org/en/data>  
 Cartography: Steven Yao  
 Date: Nov 6, 2024

## Life Expectancy and GNI Per Capita



## Life Expectancy



## GNI per Capita

