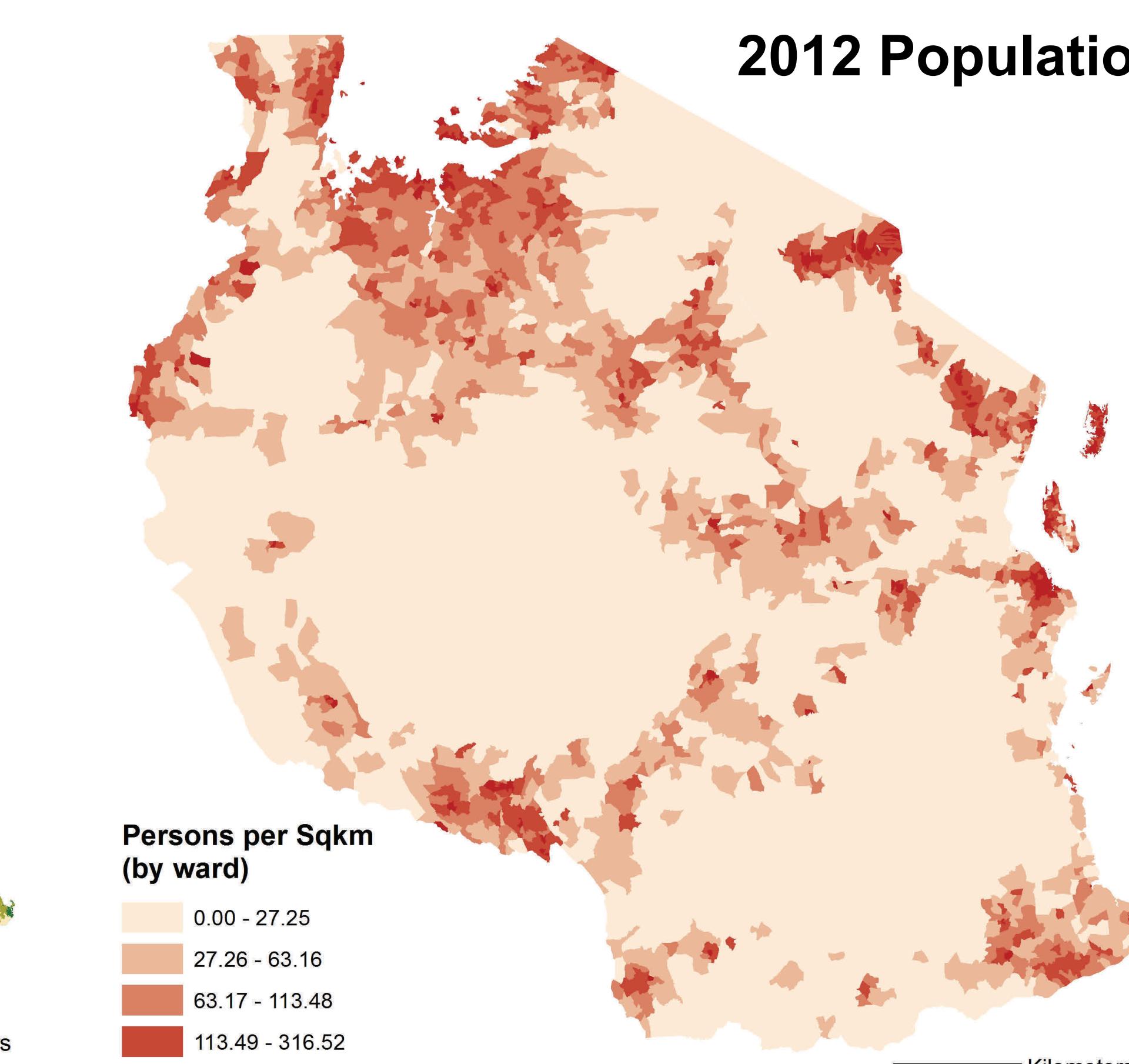
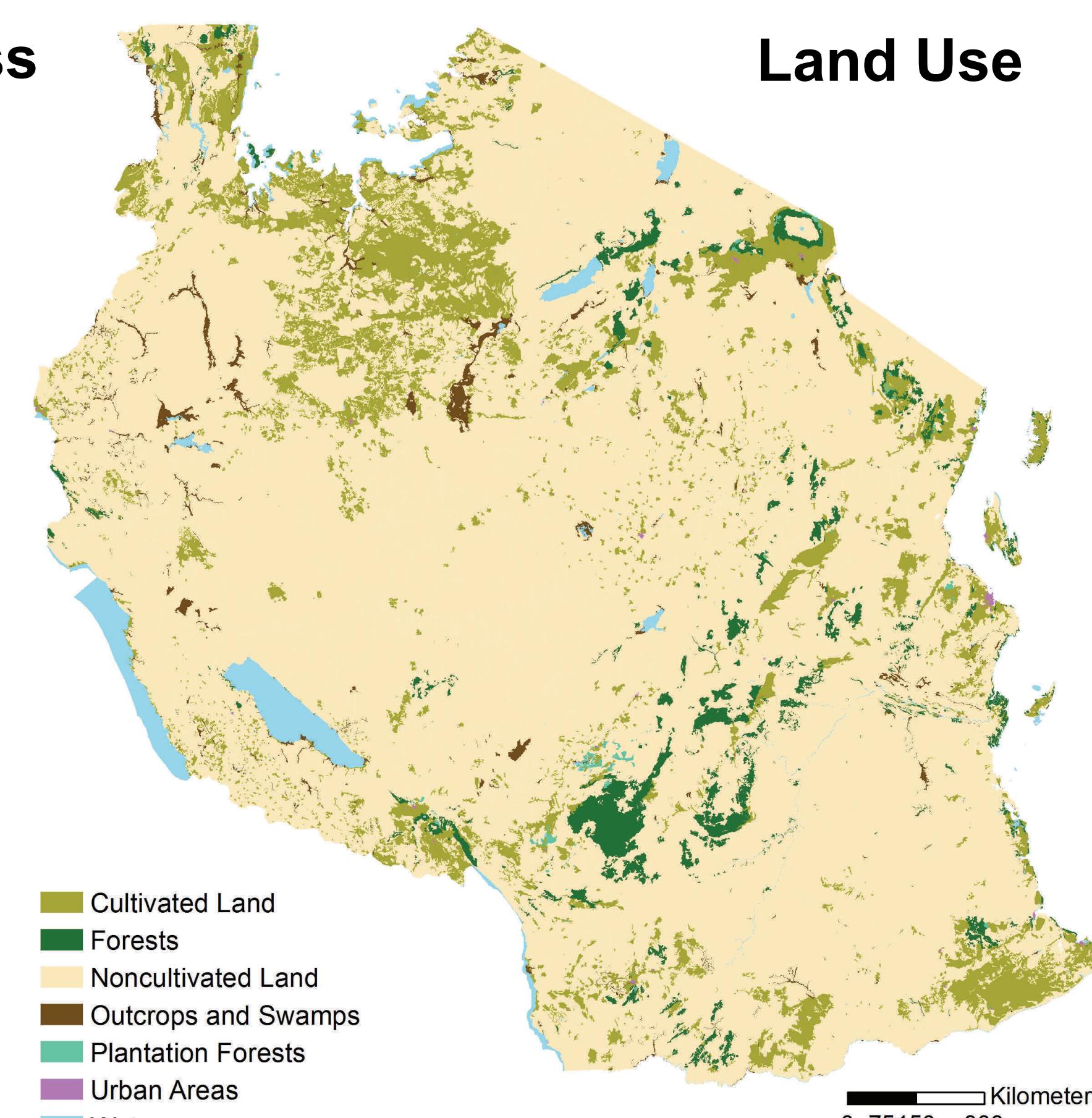
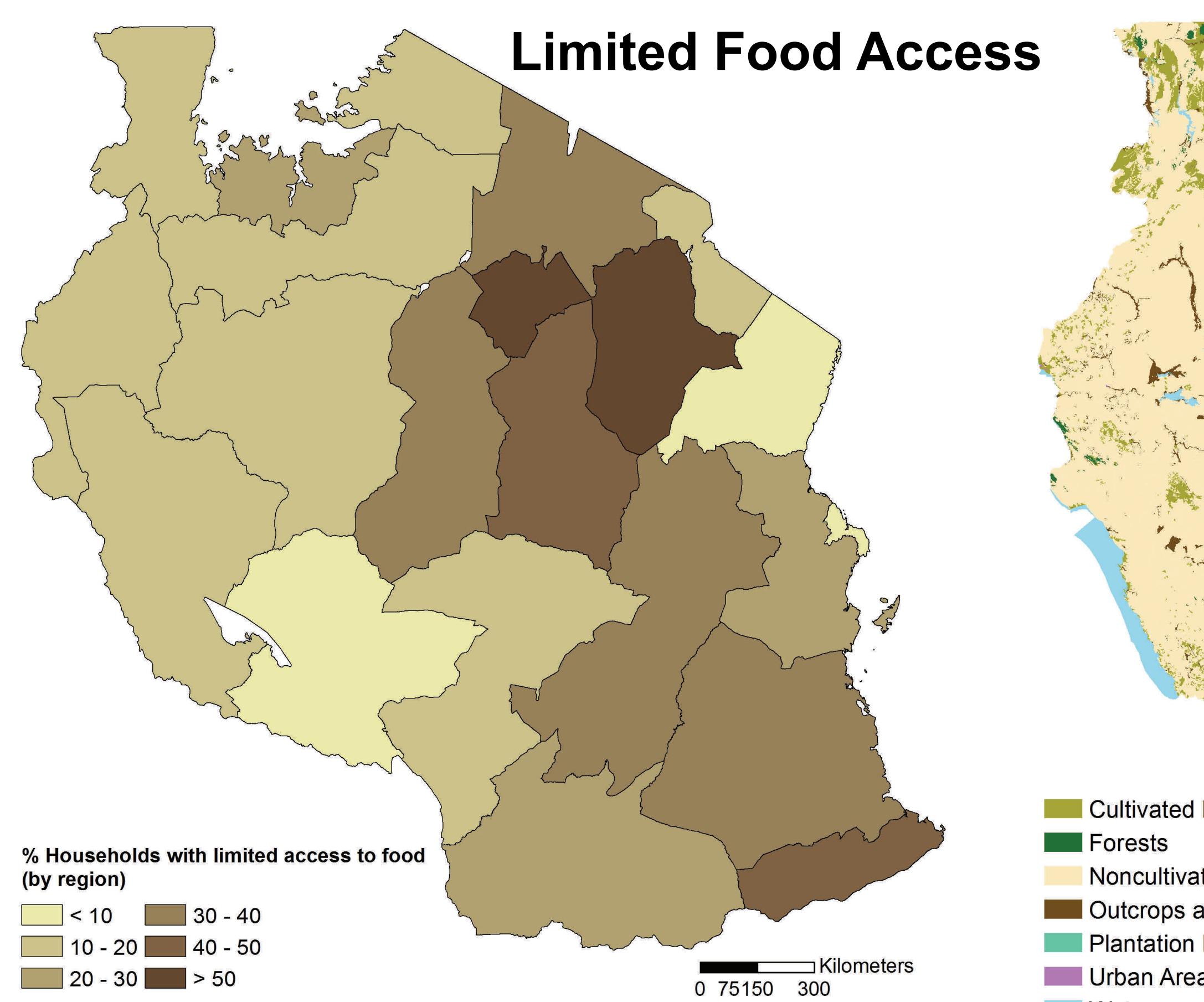
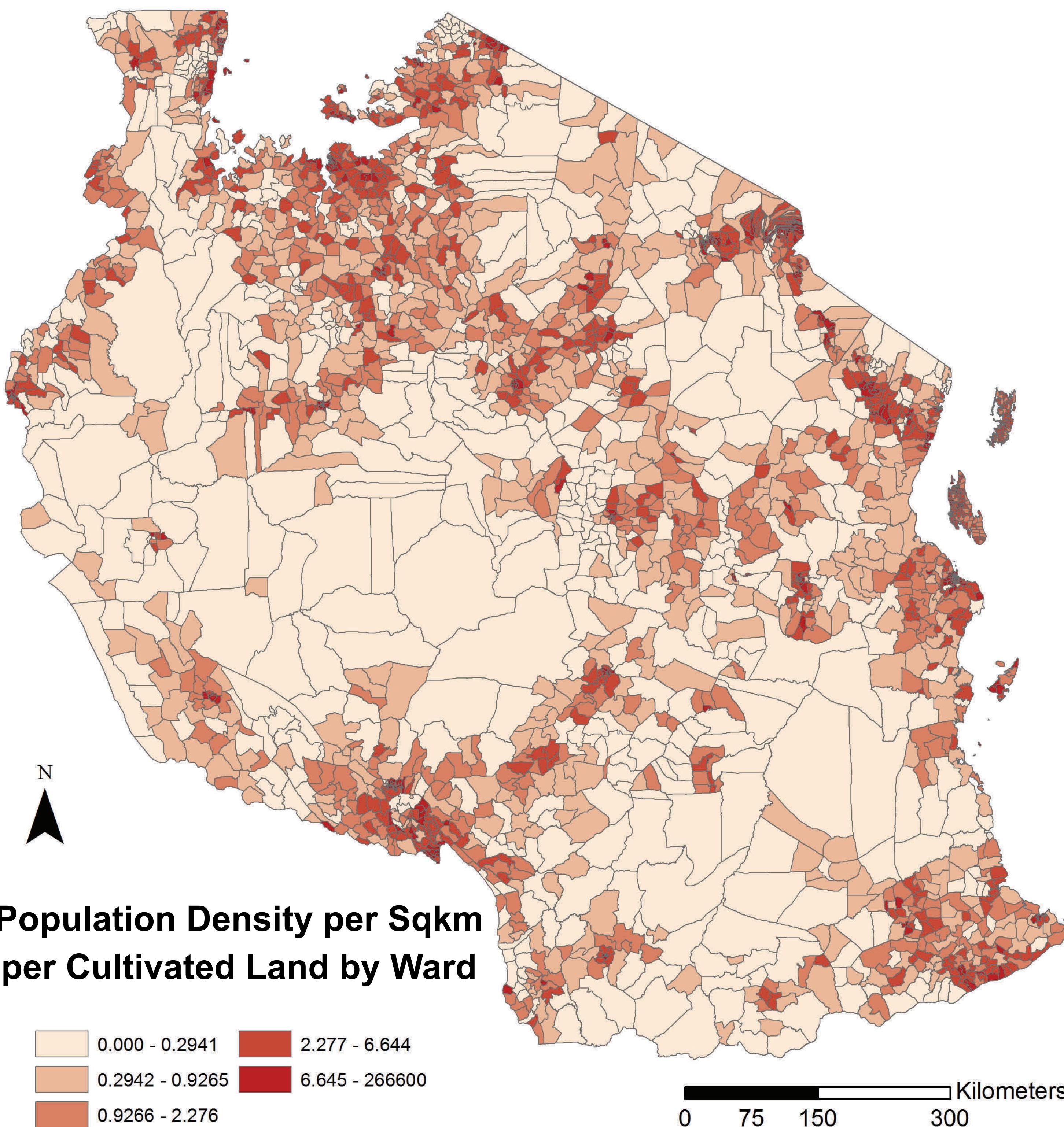


Food Security in Tanzania: Determining Land Areas with Greatest Pressure for Food Production



The project then joined the Land Use map with the 2012 Population map, which uses data from the 2012 Tanzanian National Census and shows the total population per square kilometer per ward (equivalent to a US county level). One major pressure on land is the number of people living on that particular piece of land. The combination resulted in a map which shows the areas of cultivated land with the highest population density. This is important because it maps out areas of cultivated land that are experiencing the most pressure by having the highest number of people dependent on it.

Project Overview

A recent study shows that 26% of Tanzanian farmers are unable to sell any of the produce they produce. It is hard to believe that a quarter of the farmers in Tanzania are not selling their food. Since the locally grown food is not making it to the markets, Tanzania is relying on imports to sustain its food demands. This is alarming because Tanzania has over 44 million hectares of potential farmland. Of which, only 10% is being used for agriculture. These irregularities seem to indicate that Tanzania has the resources to be a potential food exporter. This will not only save Tanzania from spending 12% of its total imports on food, it will allow Tanzania the food security necessary to continue to develop in a changing climate.

Food is a fundamental human right, and as stated under article 11 of the International Covenant on Economic, Social and Cultural Rights, every State is obliged to ensure for everyone under its jurisdiction access to the minimum essential food which is sufficient, nutritionally adequate, and safe to ensure their freedom from hunger.¹ Relying mainly on food imports makes a country vulnerable to price volatility and supply shock. Using data from the World Food Program, the project created a map depicting regions with Limited Food Access as represented by the percentage of households with limited access to food. The map shows that a majority of the households in a country with limited access to food. Using data from the International Livestock Research Institute (ILRI), the project also mapped out the annual mean rainfall. This map showed that while the center of the country has less rain, the North West and South East have decent amounts of rainfall.

As a State with specific obligations to its citizens, Tanzania must become less dependent on foreign food imports. To better understand why Tanzania is importing the majority of its food and risking the security of its citizens, this project looked at the various ways the land is being used and specific external factors that are putting pressure on the land. This will help explain the disparity of a resource rich land having to rely heavily on imports.

Project Conclusions

The project concludes that, even though Tanzania has an abundant supply of uncultivated land, external factors like rainfall and low population density are main reasons for a large portion of central Tanzania to be uncultivated. In addition, the project concludes that the limited areas of cultivated land are under high pressure due to the high population density on those plots of land. These cultivated lands with high population density also maps out areas with higher risks of being food insecure. Consequently, these are also where the urban areas are located in Tanzania. This shows the need for Tanzania to expand its cultivated area, because unless the cultivated area is expanded, Tanzania will not be able to be a food secure nation.

Project by: Xiaoyue Hou Date: May 7, 2013

Projection: Arc_1960_UTM_Zone_37S

Source: 2012 Tanzania National Census, International Livestock Research Institute

¹ Committee on Economic, Social and Cultural Rights, general comment No. 12 (1999) on the right to adequate food (art. 11), para. 14.

