Expanding cities are increasingly affected by climate change, while at the same time, the resource base for agriculture around cities is threatened by urban expansion and challenges of water scarcity or increased rainfall.

According to the Intergovernmental Panel on Climate Change-IPCC Fifth Assessment Report (University of Cambridge and ICLEI, 2014) key impacts include rising temperatures, increasing rainfall, flooding, and urban food insecurity.

Negative climate change impacts on food production and productive arable lands will impact cities with heavy reliance on food imports. The urban poor will be most affected by disruptions in food supply and increasing food prices.

These challenges require new forms of urban planning and the development of food programs and policies that are created with a specific focus on their environmental services and impact.

The IPCC also highlights that adaptation options exist in areas such as water, food, energy and transport. These include support for urban and peri-urban agriculture, green roofs, local markets, enhanced social (food) safety nets, and development of alternative food sources.

Climate Change
- Seasonal variation
- Soil erosion
- Waterlogged land
- Sea level rise
- Extreme weather events

- powerful storms
- torrential rains
- flooding
- heat waves
- drought

Ability of farmers to adapt becomes endangered, threatening all 4 aspects of food security:
- food availability
- food accessibility
- food utilization
- food system stability

Data from: Farming First