

## **New York as a Model for the Study of Urbanization**

At the beginning of the twenty-first century, for the first time in human history, more of the world's population lives in cities than in rural areas. Increasing numbers of people live in huge mega-cities where human activities dominate the landscape and every local ecosystem. The continuing growth of these megalopolises has profound effects on local wildlife, marine and terrestrial ecosystems, air purity, and overall quality of life. Such cities also exert increasing pressure on the goods and services provided by all types of ecosystems for food, space, energy, and natural resources, on the entire planet. The urbanization of humanity is accelerating and by the middle of the current century two thirds of the global population will live in urban environments. Ten mega cities now have populations over 12 million, with Tokyo the largest (26 million) and the New York City Metropolitan Area 6th largest (17 million). Between 1990 and 2020, the number of people living in urban areas is projected to double to more than 6 billion with 90 percent of that increase to occur in developing countries. Mega cities take up ca. 2 percent of the world's land area but they account for roughly 50 percent of industrial wood use, 60 percent of human water use, and nearly 80 percent of all human-produced carbon emissions. These figures suggest that the struggle to achieve an environmentally sustainable economy for the 21st century will be won or lost in the world's urban areas[1].[2]. New York City with the megalopolis surrounding the five boroughs is the largest conurbation in United States, and it will get larger, much larger. Thus, it is a good model for study of urbanization in general.

The continuing physical development of mega cities will profoundly impact both local and regional environments and place enormous strain on natural resources. The ecological foot print of cities is much larger than their structural area. On average, each person in the United States requires resources of all types representing 9,000 ha, while a typical African requires just 1 ha. Obviously, sustainability of growing urban populations will require increasing resources as represented by the ecological footprint. Concomitantly maintaining what we now consider to be an acceptable quality of life despite increases in populations within great cities will require substantial improvements in resource utilization (a decreasing per capita ecological footprint). The sustainability of great cities, their habitability, their political organization and power are all topics that are going to require new ideas and both economic and political innovation. New York City and the nation will need the best and the brightest of minds to think about this development and to come up with realistic, practical approaches to dealing with this inevitable growth. CUNY can help provide those minds.