LCLUC Science Team Meeting focus on Urban LCLUC

Objectives of the Meeting and Agenda

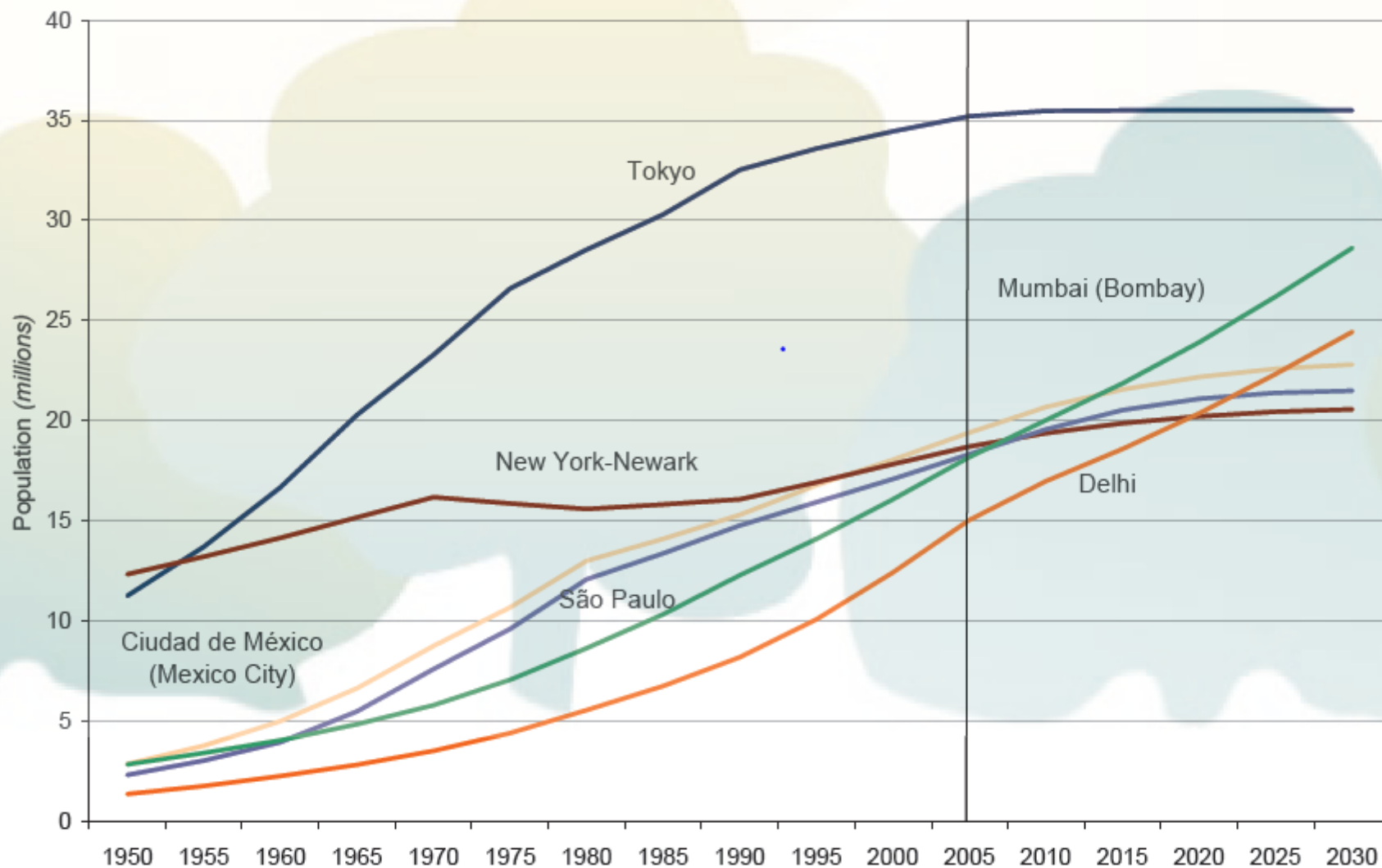# Chris Justice
LCLUC Program Scientist
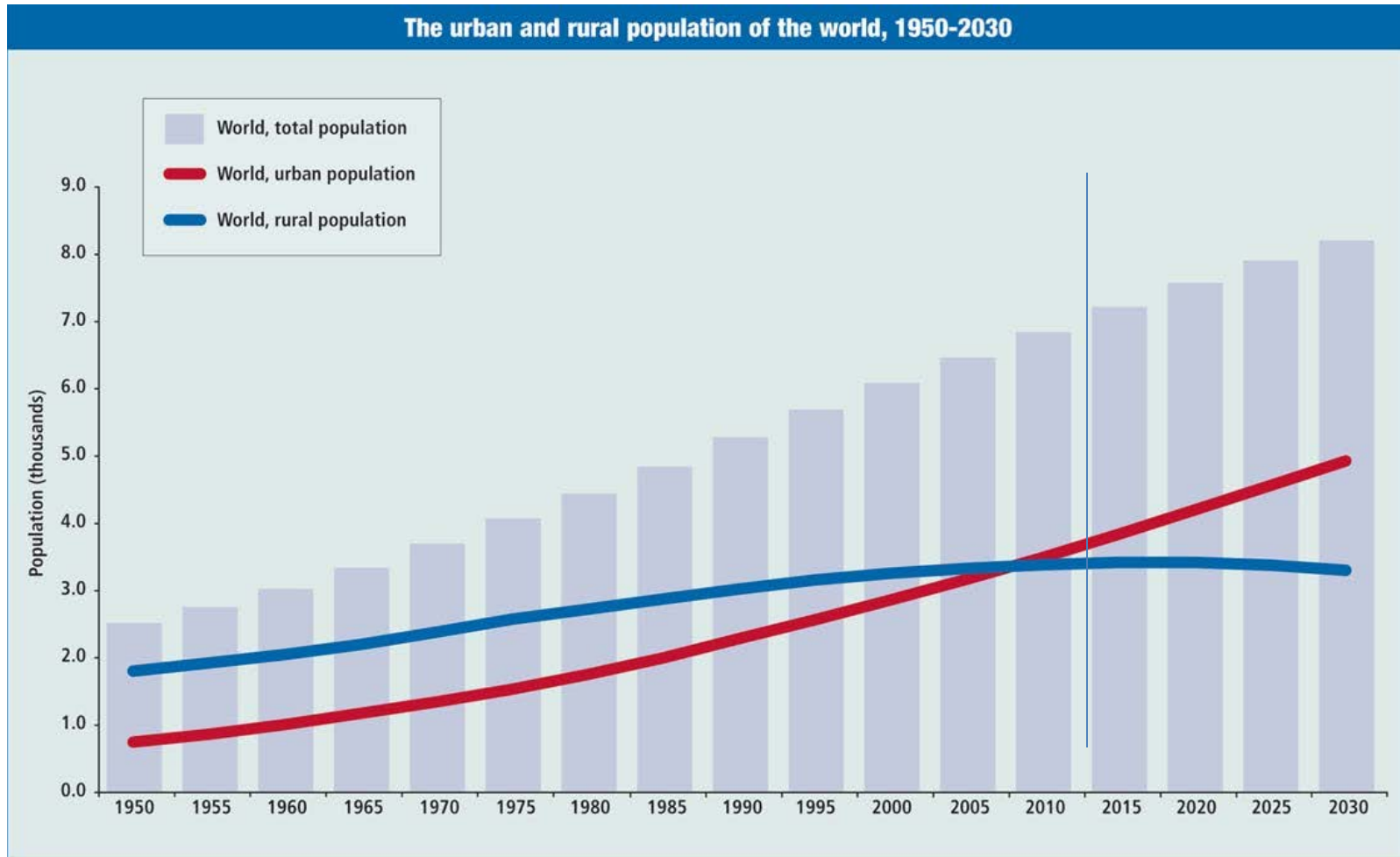
The Urban LCLUC Theme

- Over 50% of the global population is now urban (3.62 billion people) – 60% by 2030
- Annual urban growth rate estimates at 1.1% (2005-2010)
- 1950 - 2 Megacities (New York and Tokyo)
- 2014 - 21 Megacities (17 in developing countries)
- 2014 - 441 cities w. more than 1 Million
- 2005 - 51% of urban dwellers lived in fairly small urban areas with less than 500,000 people

Figure 8. Population growth of the six most populous mega-cities, 2005

UN DES Working Paper No. ESA/P/WP/200

The Urban / Rural Dynamic

The urban and rural population of the world, 1950-2030
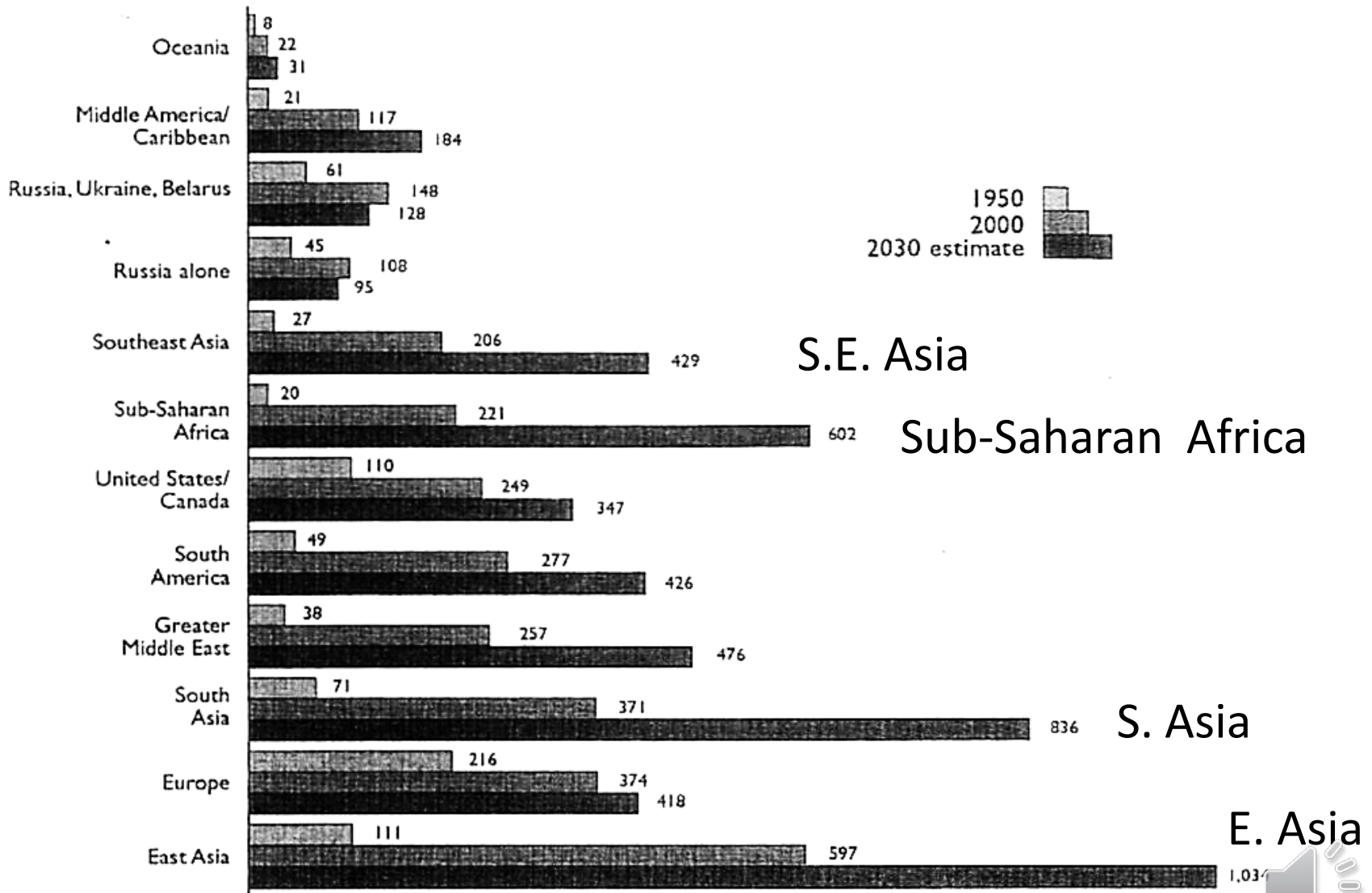
http://www.un.org/esa/population/publications/WUP2005/2005wup.htm

Urban Population Growth by Region

Figures indicate urban population in millions

Aspects of LCLUC

- Urban and suburban area expansion can be monitored by satellite remote sensing (well-suited to moderate resolution data)
  - Global monitoring capability in development > systematic global moderate resolution products?
  - Several regional studies funded - including modeling projections
- Fine resolution being used to characterize urban areas – commercial, residential, industrial, parks – automated methods being developed
- Urban and Suburban growth often replacing agricultural land
- Coastal regions often subject to extensive urban growth

Aspects of LCLUC

- Direct impacts of urban expansion on air quality, micro-climate, water quality, run off, livelihoods, biodiversity etc

- Indirect land use change impacts: food/water supply, urban foot prints and land use teleconnections

- Traditional Census data complimented by new forms of 'ancillary data' collection - crowd sourcing cell phones, tweets etc.

- Urban population vulnerability to extreme climate events - heat waves, flooding, tsunami, etc

- Urban / rural dynamics and dependencies - out migration from rural areas, suburban expansion into rural areas, economic dependencies

- Move towards sustainable urban systems, green cities, urban and transportation system planning

Objectives of the Meeting

- Report on Project Progress (PI's)
  - Thematic Focus of the Meeting on Urban LCLUC studies
  - Update on LCLUC Synthesis Studies
  - Poster Session and Rapid Intros from NIP, ESSF's
- Update the Team on LCLUC supported or related program activities
- Discuss new and planned program developments
  - Webinars
  - Metadata
  - Upcoming team meetings

A chance to network with other LCLUC Scientists

Meet new Team Members

and reconnect with 'old' ones

An opportunity to talk with (or listen to) the Program Manager

and provide Feedback on the program

LCLUC Summary Agenda

- **Day 1**
  - Session 1:   Introduction to the meeting
  - Session 2:   LCLUC Urban Studies
  - Session 3:   Invited talks from International Partners
    - *Discussion on progress in urban LCLUC*
  - Session 4.   Rapid posters introductions and viewing

- **Day 2**
  - Session 5.   Programmatic Perspectives and Initiatives
  - Session 6.   LCLUC Synthesis Studies Updates
  - Session 7.   Rapid posters introductions and viewing

- **Day 3**
  - Session 8.   IDS Urban Studies (Environmental Impacts)
  - Session 9.   Meeting Wrap Up Session
    - *QA and Discussion*
    - *Summary and Conclusions*

Logistics

- PIs & Co-Is Please check the LCLUC Website to make sure your **project information** and **Personal Information** is up-to-date
  - Provide update your information here: https://lclucmeeting.wufoo.com/forms/profile-update/
  - Link also available here: http://lcluc.umd.edu/meetings.php?mid=52
- New LCLUC-Metadata Page-Submit your data product today!
- Webinars starting soon
- Submit FrontPage worthy news articles for the LCLUC Website Makeover!

Logistics

- **Poster Session I** Today 4/3/2014 (Posters numbered 1-20)

- **Poster Session II** Tomorrow 4/24/2014 (Posters numbered 21-44)

- Pin-up your poster on the board with your Poster Number (Next Door). Check at the registration desk for updated numbers.

- Please make sure Catherine has a copy of your presentation and poster

- Wifi- Connect to Hilton Conference (no password required)