

# ARCTIC FUTURES: IT'S ABOUT CLIMATE CHANGE – BUT ALSO MUCH MORE!

**Gail Fondahl**

President, IASSA

Professor, Geography, UNBC

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**IASSA**  
INTERNATIONAL ARCTIC SOCIAL  
SCIENCES ASSOCIATION

**UNBC** UNIVERSITY OF  
NORTHERN BRITISH COLUMBIA

# Climate Change in the Arctic

- Climate change presents serious challenges (and opportunities) to the Arctic
- Discourse on climate change: is it overwhelming other critical concerns?
- Critical drivers of change in Arctic are not limited to climate change

**It's about climate change**  
**– but also much more**

# Beyond Climate Change: Rapid Socio-Economic Change

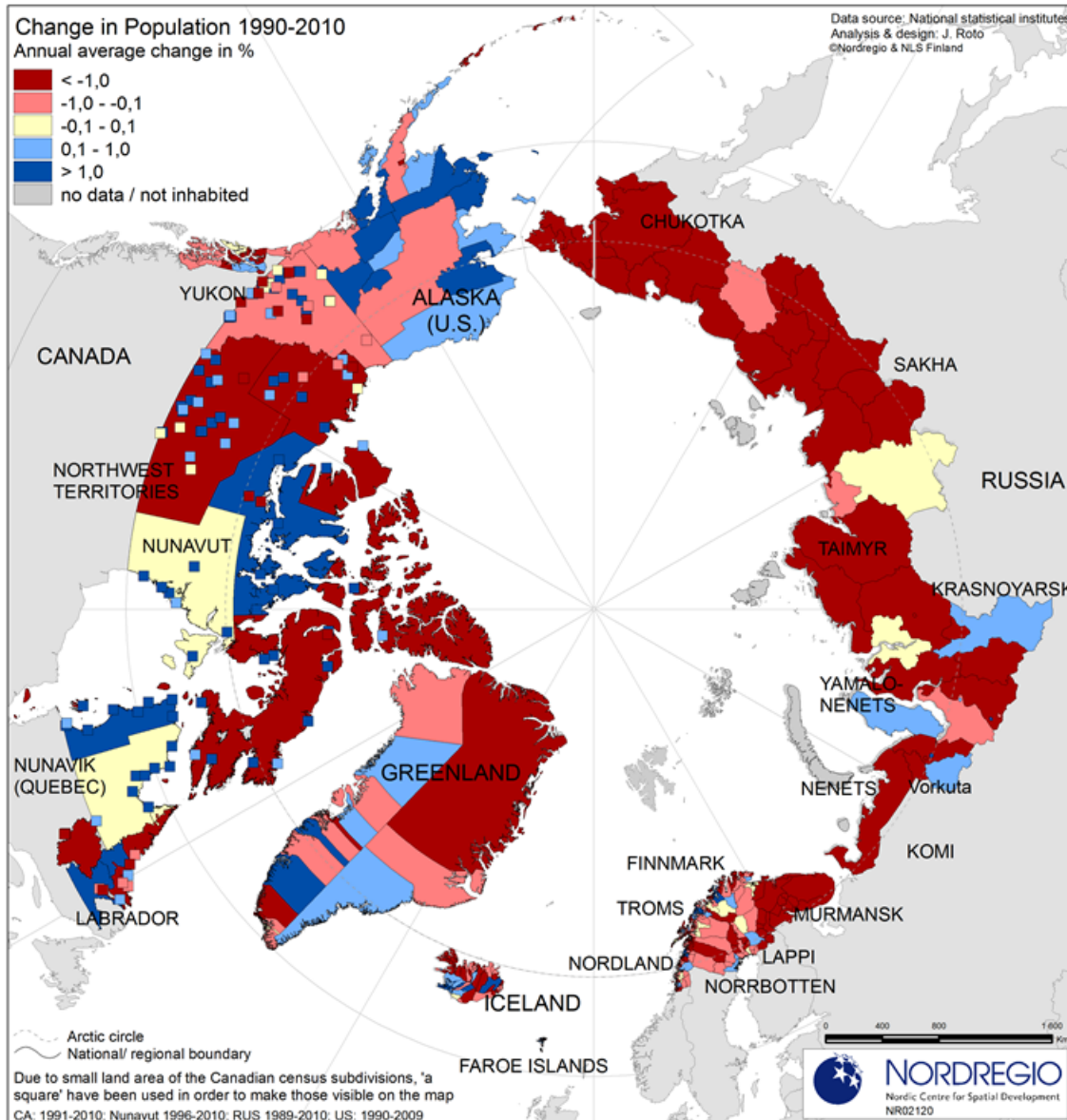
- **Demographic Change**
- **Economic Change**
- **Political Change**
- **Cultural Change**
- **Changes in Health &  
Well-Being**

# Who Lives in the Arctic?

- Approx 4 million people
- Approx 8% Indigenous
  - (40+ linguistic groups)
- Highly urbanized
- A few large centres; rest of population in very small, widely dispersed settlements

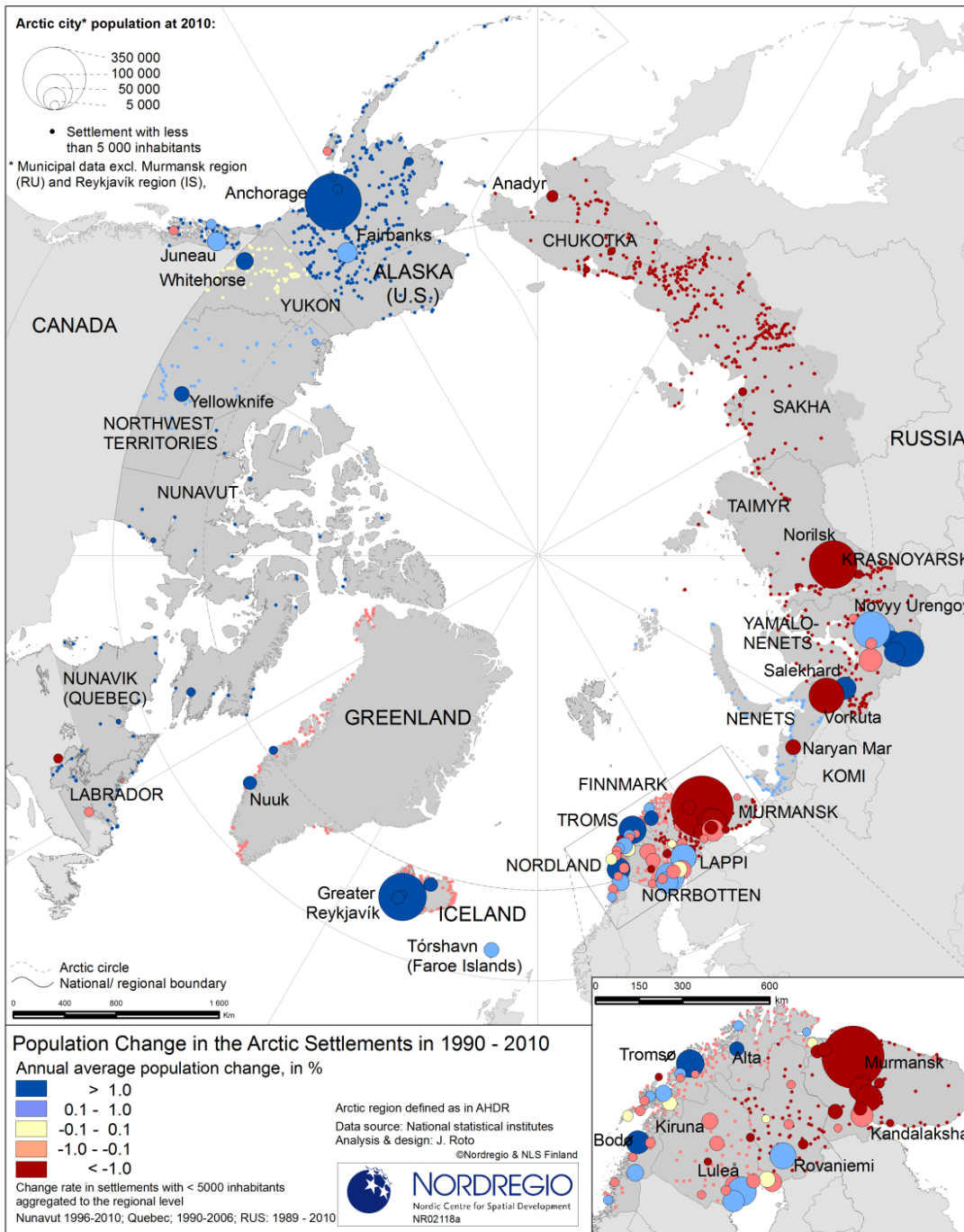
# Demographic Change

- Declining Population in Many Areas
- Outmigration of Young/ Working Age



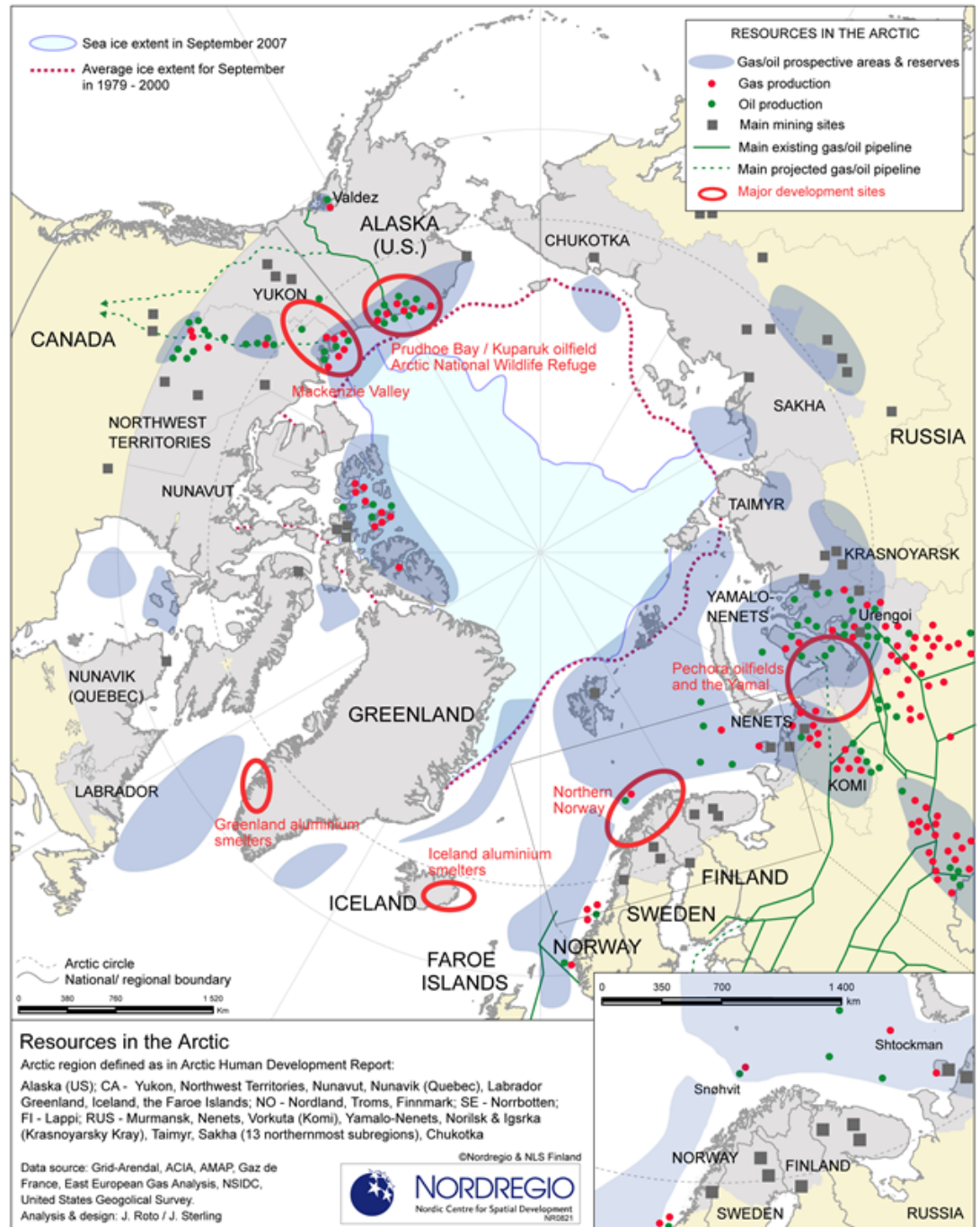
# Demographic Change

- Increased Urbanisation
- Growing Imbalance in Sex Ratio
- Growing Ethnic Diversity



# The Arctic Economy

- International Resource Economy
- Transfer Economy
- 'Traditional' Economy





# Key Changes in the Arctic Economy

- **Commoditization**
- **Privatization**
- **Geographical Concentration**
  
- **Global rise in raw materials prices**
- **Increased demand from East Asia**
- **Accessibility (sea, land)**



# Questions increasingly asked:

- Who has access to resources?
- How will benefits be distributed?
- How will sustainability be ensured?



# Key Political Changes

- End of Cold War = reduced military tensions, cooperation in Arctic
- Situation in Arctic compared to other areas of globe (e.g. Suez, Malacca Strait)
  - impacting desirability of resources, transport routes
- New governance regimes

# Key Cultural Changes

- Mandatory Schooling ,Relocation, Urbanisation, Wage Labor
- In-Migration
- Communications Technologies, Social Media
- Mass Media/Global Culture
- Cultural Stress
- Cultural Adaptation, Culture Fusion



# Health & Well-Being: Improvements, Heightened Disparities

- Improved Health Services
- Improved Life Expectancy
- Introduction of New Diseases
- High Rates of ‘Social Pathologies’, Mental Illnesses



# “Double Exposure”

## Climate Change + Economic Globalization

- Increased Shipping
- Fisheries: Growth, Changes
- Increased Mineral/Hydrocarbon Extraction
- Increased Tourism

# Climate Change in the Arctic

- **Drivers of climate change are social**
- **Many consequences of climate change have social implications**
  - Changing landscape
  - Changing resource distribution (fauna, flora)
  - Changing accessibility

# Addressing Change in the Arctic

- What is role of values, beliefs in perceptions of climate change and other change?
- What factors influence individual & collective responses to change?
- What political responses to change are needed?
- What are capacities to adapt to change (across axes of space, ethnicity, gender, etc)?





# Arctic Council: Canada's Priorities

- **Creating conditions in North for dynamic economic growth, vibrant communities, healthy ecosystems**
  - Responsible Resource Development
  - Responsible & Safe Arctic Shipping
  - Sustainable Circumpolar Communities

# *How do we make decisions in the face of uncertainty?*

- Understanding *multiple* and *synergetic* drivers of change; complexities of processes of change (social + biophysical)
  - Continuing to build partnerships with natural scientists for integrated research into change and adaptation strategies to change, into sustainability
- Measuring and tracking *human development* in the Arctic
  - Identification of key social, economic, political, cultural, health *trends*  
(Opportunities for community monitoring)

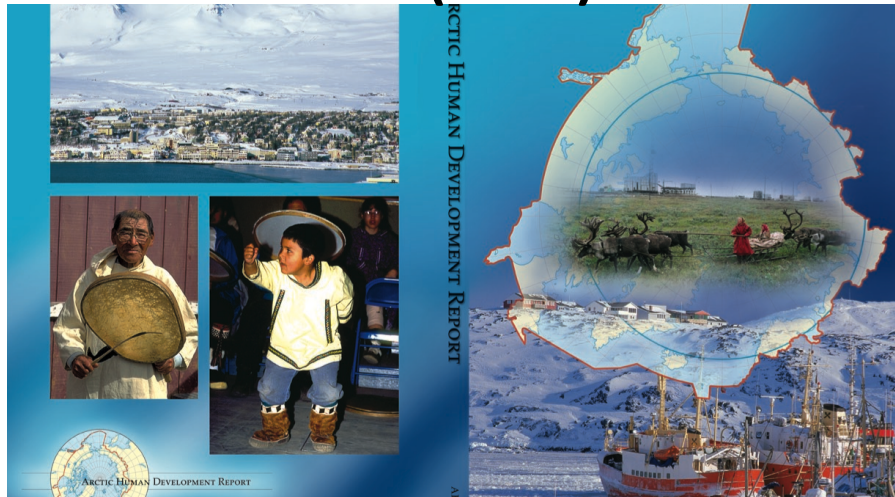
# *How do we make decisions in the face of uncertainty?*

- Continued improvement of co-production of knowledge with local residents/stakeholders - across topics (*including 'non-traditional'*)
- Delivery of relevant knowledge to
  - decision-makers
  - policy bodies
  - Arctic residents



# For Further Information

## *Arctic Human Development Report (2004)*



## *Megatrends (2011)*



## *Arctic Human Development Report–II coming in 2014*



# IASSEA

INTERNATIONAL ARCTIC SOCIAL  
SCIENCES ASSOCIATION

Anyone interested in the Arctic may join IASSA

[www.iassa.org](http://www.iassa.org)

[gail.fondahl@unbc.ca](mailto:gail.fondahl@unbc.ca)

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(International Congress of Arctic Social Scientists)

# Thank you

Thanks to Canadian International Center for the Arctic and  
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