Strategies for Sustainable Urban Development in the Arctic Region

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Structure of presentation

1. General urbanisation processes in the Arctic
2. Case study snapshots: Reykjavik
3. Case study snapshots: Nuuk
4. Main messages on the future
General urbanisation processes in the Arctic (1)

- Since the 1960’s, almost all growth has been in cities (e.g. 80% of Iceland’s population lives in commuting distance to Reykjavik and 94% live in an urban area)
- But in a lot of cases it is a very new process – only the last 60-70 years

Main drivers:
1. The international resource economy, serving markets in our global economy
2. The traditional economy, centred fishing, hunting, herding and gathering is for local consumption;
3. The transfer economy, bringing funds into the region from different levels of government to support society and public services. (Rasmussen 2011)
- Arctic regions according to the share of the population in three main economic sectors: primary, secondary and tertiary
- A natural resource myth?
- The primary sector often employs less than 10%, the secondary sector between 5% and 20%, and the tertiary sector at least 50% employment (involvement)
General urbanisation processes in the Arctic (3)

- Besides becoming more urbanized the larger settlements become larger, while the smaller become smaller.
- The reasons for moving to the larger places are the more diverse opportunities available.
- And not the least with the options of getting higher educations and thereby access to jobs in two different sectors:
  - On one hand the public sector
  - On the other hand responding to the demands from the knowledge economy.
General urbanisation processes in the Arctic (3)

In larger settlements:
- Population growth
- Dominated by administrative and educational activities
- Coordinate and provide public services to rural areas

In small settlements:
- Population decline
- Located on the coast or along rivers where the possibilities for fishing and hunting of sea mammals are abundant
- Significantly aging populations
Case study snapshots

- In our case study presentation two directions in urban development will be emphasized:
  
  - Concentration of population – Case Reykjavik, Iceland
  
  - Urban activity sprawl – Case Nuuk, Greenland
Case study snapshots
Reykjavik, Iceland
Reykjavik, Iceland

Sprawl:
- Urban sprawl out to neighbouring municipalities was already taking place in the 1950’s and 1960’s.

Ownership:
- According to a survey conducted in 1979, 83% of families in Reykjavik own their dwelling, compared to 91% in neighbouring municipalities.

Challenges:
1. Municipal competition on land bids and for residential growth, especially in the years leading up to the 2008 financial crisis.
2. A market preference for single family houses.
3. More and more people accepting long commutes as a way of life.
Case study snapshots
Nuuk, Greenland
Top and bottom maps:
Expansion of Nuuk by decades from 1945 and to 1995. Colours on the maps show what has been established during each of the indicated decades. The map and the colors to the left show planning as of today (2015). Red bars show neighbourhoods, red circles: urban centres, orange circles: community centres, orange open circles: future community centres, blue lines: industrial areas, green markings: exempt landscape and greenways.
Nuuk, Greenland

- Compact and well-defined urban form preserves natural landscape in the city
- Good public transportation within the urban area and a focus on complete communities in new developments

Challenges:
- Providing access to surrounding natural landscape that have vital socio-cultural values
- Proposed airport expansion and the impacts on the rest of Greenland
Nuuk, Greenland

- No roads are connecting Nuuk with the outside

- But ice free conditions year round combined with a wealth of leisure time boats enable the population to providing access to surrounding natural landscape that have vital socio-cultural values
Nuuk, Greenland

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Main messages (1)

- In many cases Arctic urbanisation is a new phenomenon, impacts on traditional activities are incorporated in planning strategies.

- Some Arctic cities face challenges associated with urban sprawl and strategic densification is a necessary planning response.
Main messages (2)

- Primary sector interests in mining, fishing or other activities appear to have a powerful effect on urban land use in the Arctic.

- Arctic cities have unique relationships to nature that must be prioritised.
Main messages (3)

- The youth and women find new ways due to

- Job opportunities!

- Global perspectives!
References

The project was part of an initiative under Nordic Council of Ministers’ programme "Friends to the West" and further elaborated on in these publications available at Nordregio’s website

www.nordregio.se