



# Mittuniversitetet

#### MID SWEDEN UNIVERSITY

# Universities, Research & Development in Northern Sparsely Populated Areas

### **Opportunities and Challenges**

NSPA Forum Kuopio, Finland September 22, 2011

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- Brief overview of universities in northern Scandinavia
- Big, small and development funding
- Universities and natural resource development
- Universities and social resource development
- Stronger united regional and international networks (NSPA, case study NRDC with BC Canada)
- Northern innovation technology and digital society



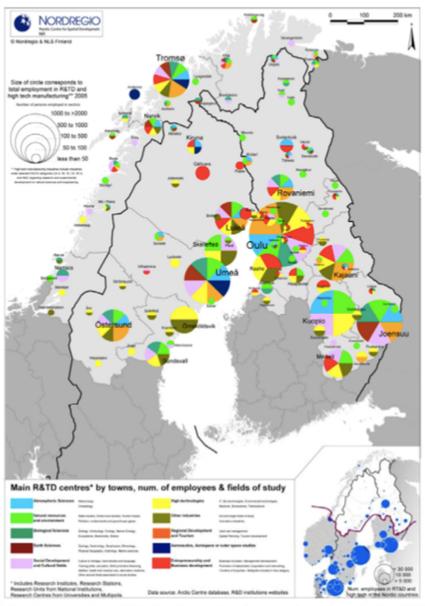
#### Distribution of universities and colleges in northern Scandinavia











14: Research and Technology Development centres in the NSPA 2011-09-29



### **Big, small and development funding**

Large research universities – i.e. Umeå, Tromsö, Oulu

- Vetenskapsrådet (national)
- Jubileumsfond (national/Scandinavian)
- EU structural funds (international for periphery region)

Smaller regional collegesand universities – i.e. Mid Sweden University,Narvik, Bodö, Alta, Harstad, Nesna, University of Eastern Finland

Central and regional government, KK stiftelsen, Vinnova, ideella orgs (i.e. Save the Children)

• EU structural funds

Structural funds are the best guarantor of longer-term, more holistic strategic development of the region



#### **Universities and natural resource development**

- Forest management, cleantech, fiber science, biofuels
- Hydro, mineral and other resource development
- Engineering, computer science, digital technology for industry



#### **Universities and social development**

Pysical insfrastructure – transport and communication

Social infrastructure – schools, hospitals, government

Population infrastructure – demographics, labor market

Community infrastructure – civil society, ideela groups, belonging and social value



## (doing the rounds among my lefty American Facebook friends...)

NOTE: The "Social contract" is considered radical, a bit "commie" in mainstream US politics..

H/T to Ashley Elizabeth Jochim: "There is nobody in this country who got rich on his own. Nobody. You built a factory out there -- good for you. But I want to be clear. You moved your goods to market on the roads the rest of us paid for. You hired workers the rest of us paid to educate. You were safe in your factory because of police forces and fire forces that the rest of us paid for. You didn't have to worry that marauding bands would come and seize everything at your factory... Now look. You built a factory and it turned into something terrific or a great idea -- God Bless! Keep a Big Hunk of it. But part of the underlying social contract is you take a hunk of that and pay forward for the next kid who comes along." -Elizabeth Warren (Mass. Candidate for Senate)

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## Mid Sweden University: profile areas and network strategy

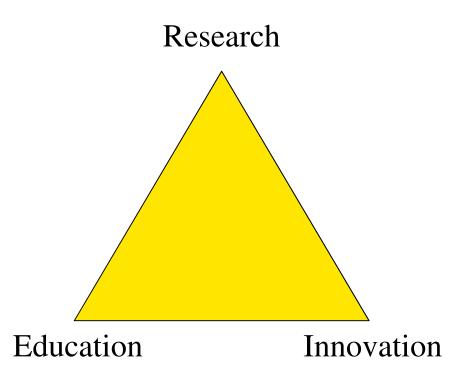
#### from Christer Fröjdh's presentation at NRDC June 2011 slides 11-16 here



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## **The Knowledge Triangle**

- The knowledge triangle refers to the interaction between research, education and innovation, which are key drivers of a knowledgebased society.
- In the European Union, it also refers to an attempt to better link together these key concepts, with research and innovation already highlighted by the development of the Lisbon Strategy and, more recently, lies behind the creation of the European Institute of Technology (EIT). (Wikipedia)





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# The research profile: Forest and Mountains ...

#### • Background:

- "The problem is not that Sweden has too many universities but too many universities that do the same things..."
- Solution:
  - Define a research profile based on
    - Comparative advantages to other universities
    - Collaboration with industry and public sector to create impact
    - Partnership with the region to select topics



## **Research programs**

- Forest as a resource
- Industrial IT and digital services
- Health, sports and sports tech
- Tourism

- Entrepreneurship
- Banking, insurance and pension
- Media and communication
- Cultural heritage
- Crisis and risk



Fundamental research

Applied research

Development

Basic funding

Research council

Foundation for Strategic Research

Seventh Framework Programme –

Industrial impact in an international perspective

KK-foundation – industrial impact, national

Vinnova – industrial impact, national

EU structural funds – industrial impact, regional

ALMI



# **Collaboration with industry**

### • Joint projects

- Co-funding with public sources
  - KK-foundation
  - Vinnova
  - FP7 (European Commission)
- "Co-production"
  - Scientists at the university and the industry work together to solve the problem.
  - Includes transfer of knowledge in both directions
- Contract research
  - Fully paid by the industry



# **Regional dialogue**

- The university is active on the regional level
  - "Länspartnerskapet" steering group for the regional development plan
  - Partner in the regional office in Brussels
  - Adjunct board member in Science Parks and innovation clusters
- ... up to national level
  - The monitoring committee for the structural funds
  - The reference group for evaluation of the structural funds
  - The advisory group for regional development at Department of Enterprise
    - Focus on European policies and European funding for regional development



## Innovative northern initiative: NRDC Pre-conference activity

- Mål 2 project internationalization (MIUN)
- November 2010 exploratory visit to Vancouver, Prince George and Terrace, BC
- Report December 2010
- Planning initiated January 2011
- Canadian ambassador accepts invitation February
- Canadian delegates and Swedish counterparts finalized spring 2011





Photos (slides #18-23) from Janine North's presentation June 16, 2011





### **Prince George, BC** PG Pulp and Intercon Mills

Sweden

Sundsvall,

**Ortviken Paper** 



Hudson's Hope WAC Bennett Dam

Sweden

Stornorrfors,

Vattenfall's



Prince Rupert, BC Port of Prince Rupert

Sweden

Sundsvall,

Sundsvalls



# Sundsvall, Sweden

**Cosmopol Casino** 

Quesnel, BC

**Billy Barker** 



# Henrik and Daniel Sedin Vancouver Canucks, British



# Agenda June 12-16

- Monday arrival
- Tuesday drive to Östersund, attend RDC, dinner
- Wednesday RDC, then drive to Torpshammar, dinner and boat tour
- Thursday drive to Sundsvall, NRDC, Ambassador's dinner at Landshövdings residence Härnösand
- Friday NRDC meeting, final day



## **Conference themes**

Main question: How can the less populated northern regions contribute to Sustainable, Smart and Inclusive growth?

- Political under-representation and 'north-south' relations
- Regional universities as a driver of regional development
- Service provision and changing demographics
- How to encourage small business development in the north



## **Key Canadian delegates**

#### Prince George









#### Vancouver







Terrace









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## **Post-conference developments**

- Dirk Brinkman, Janine North and Rob van Adrichem visit Domsjö Dirk purchased a biofuel processor for his new plant on the northern BC coast
- Three MIUN researchers are visiting UBC Vancouver autumn 2011 sports technology, prosthesis development, business innovation
- More visits are likely to follow!
- Greg Halseth proposes NRDC-2 in Vancouver and Prince George, June 2012
- Follow-up communication with Volkoff, Matthews, Halseth and others suggest that next meeting should include immigration/integration issues



# **Looking Forward**

Overview of "comparative advantages" gleaned from meetings, conversations

	Mid Sweden	British Columbia
Economic and technical innovation	Cleantech, biofuels, fiber science, digital services, tourism	Bioenergy, forest and mineral diversity, silvaculture, tourism
Government and public services	Well-established public infrastructure, municipality (kommunen) has taxation and other powers	Capacity for rapid change, flexibility, place-based development orientation
"Community" – belonging, value	Physical and institutional infrastructure intact, established towns, cultural identity	"train to retain" approach, ability to attract skilled labor, work with First Nations and immigrants



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# **Northern Regional Development Project**

Exploring best practices for mutual benefit in a global age

- Economy
- Technology
- Community

### Harnessing the diverse group of actors in both regions

- politicians and "tjänstemän"
- businessmen and entrepreneurs
- academics in natural and social sciences



# Moving forward – northern innovation and best practices

- Energy innovation, sustainability
- Technology and infrastructure innovation for sustainability
- Digital society research honesty and awareness of positives (reach, privacy, services) and negatives (reach, privacy, services!)
- Demographic challenges quality lifestyle for young and old encouraging young people to come here and build families
- Integration challenges with fewer people in northern areas, need to harness competence and value of non-native born population – improve context for inegration, communication between peoples
- Political extremism challenges...much more research is needed to understand political polarization, alienation that finds expression among young people<sub>9</sub>(London) and against all people (Utooya)



# **TACK FÖR ER UPPMÄRKSAMHET!**



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