

#### an even

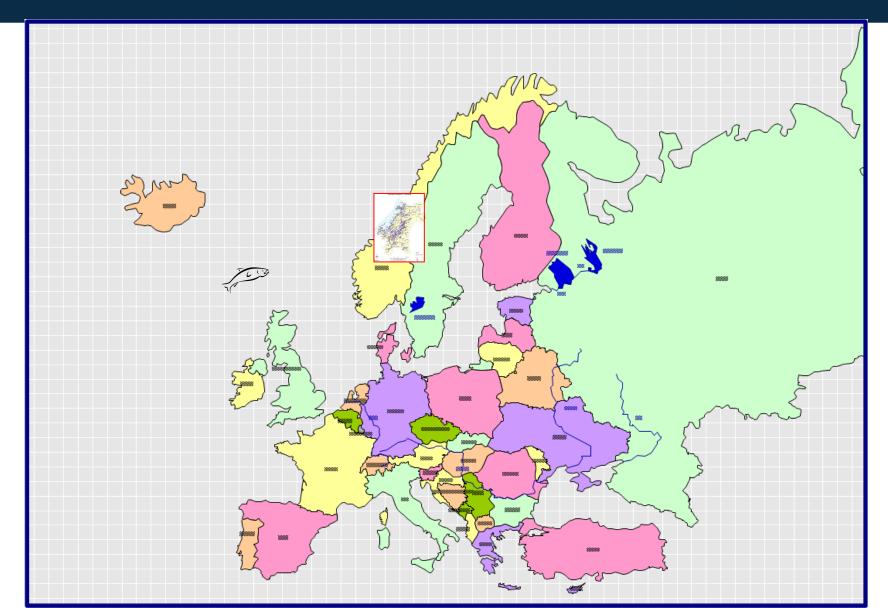
### Towards a smarter Mid-Norway

Håkon Finne, SINTEF

Workshop: Is "smart" the right approach to achieve jobs and growth?

Brussels, 2014-10-07





#### Specializations in Trøndelag

**Aquaculture** Food industry Concentration + Employm. 2.600 Røyrvik Export +++ **Population** Profitability + Total 440' Trondheim 180'/275' R&D (+ higher education) Concentration +++ Employm. 2.000 (+ ~7.000 + ~35.000 students) Export (+) Profitability \* Midtre Gauldal Legend population per km2 Map base: Norwegian Mapping Authority Data: Statistics Norway (1) SINTEF Assembly: H Finne for RIS-Trøndelag

Forestry
Pulp, paper, etc
Concentration +++
Employm. 1.400
Export ++
Profitability -

Farming
Food industry
Concentration ++
Employm. 11.300
Export (+)
Profitability \*



# Farming: Thinking ahead, mobilizing for local food, reshuffling R&D relations

- Think-loft Trøndersk Agriculture: Since 2003, informal network (6-20 people) think tank of high level administrators (triple helix); draws up strategies for lowering cost, increasing differentiation, stretching for more regionalized policies
- Oi! Trøndersk Food & Drink Ltd: Since 2005, SME (5-6 people) owned by ~100 firms/institutions, network concentrator & mobilizer for joint undertakings for small specialty producers, recently also active in promoting R&D collaboration
- Green Research: Initiative to improve R&D efforts & results in food industry, improves relations R&D/producers by transparent collaborative match-making and professional project development, introduces new actors
- Agriculture21 Trøndelag: Regional bio-economy innovation initiative
   (~20 significant partners), on template of national initiatives in more hightech fields



# Aquaculture: Commercial success based on combining experience, science, technology

- "New" industry with great expansion potential
- Marine strategic plan Trøndelag: Triple helix initiative (2007-2014) to become world leading region for sustainable aquaculture, addresses barriers to growth; technology suppliers particularly strong
- AkvARENA: Cluster initiative, fostered (2008-2012) by public support program, now membership organization, focus on knowledge, technology and joint undertakings
- **FornyMar:** Public sector innovation project to enable regional authorities to handle new regulatory challenges under uncertainty and fragmented regime



# R&D and higher education: Industrial renewal and new enterprise

- OECD review of HEIs' regional function: NTNU & SINTEF together make up the most important asset of Trøndelag in the knowledge economy, but they are underutilized in the region.
- High-tech spin-offs to the region since 1970: 200+ firms, 2.000+ high revenue jobs; particularly strong in ICT
- Commercialization as a specialization now promoted by local authorities
- **Upgrading of existing firms:** Higher on the agenda, but more work required on both sides
- **Students as levers of change?** Expose students to local industry, they will provide new knowledge & fresh perspectives, may find interest in local jobs; will require committment from academic staff & firms



#### **Experimentation and outcomes**



























- VRI program: National R&D program (2007-2017) pushes regions to develop Triple Helix partnerships and experiment with strategies and measures, backed by a regional innovation research agenda
- **Knowledge brokers:** Skilled matchmakers from R&D institutes visit SMEs, help develop R&D or other projects that will support firm's strategy, link up with appropriate R&D staff locally or elsewhere, facilitate funding (in operation since mid 1980s)
- Impact on R&D behavior in SMEs: Difficult to measure
- **Impact on support behavior in HEIs:** Yes, but more work required
- **Jobs and growth:** New, perhaps not more jobs
- (Even) smarter through S3? Will i.a. employ innovative triple helix gap analysis from Ostrobothnia (Finland) to leverage new opportunities





