

National Innovation Systems

Anil Hira

SFU

Fall 2009

Nelson's Key Points

- Why central planning fails
 - Why did the Soviets, w/ advanced weapons system, suffer eco collapse?
- General vs. applied science
 - Can you think of examples?
 - What happens when knowledge created is easily diffused?
 - Why are there fewer patents for processes vs products?
 - Implications for GPTs?

National Innovation System Framework

- Triple Helix relations
- Private sector-
 - Production for global market niches; applied R&D
- State-
 - Support operating environment; transitions to new industries (L &K); collective goods, including support of education
- Education- I-t HK; training; basic R&D; evaluation
- Why is this system inter-dependent?

New Schumpeterian Frameworks

- What adjustments to NIS do Carannyis & Campbell suggest?
- What is the defn of mode 1 vs 2 vs 3?
- How do they work in globalization vs natl vs regional?
- What do they mean by clusters and what types do they identify?
- Why is the concept of networks so important to them?
- Why do they define it is a “fractal innovation ecosystem?”
- What suggestions would you make to improve this model?

Exercise for Next Week (mandatory)

- Look at slides for Measuring s&t performance- conduct the exercise and bring it to class for discussion