

**FOOD ON THE TABLE  
AND DISEASE AT THE DOOR:  
Insights from low-income countries  
and regions for measuring innovation**

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# How do we find indicators for broad-based innovation?

- STI indicators and theory in advanced economies
  - What if reality challenges our models?
  - Linearity, user-led, open and hidden innovation
- STI indicators and theory in developing countries
  - What if theory gets lost in translation?
  - Assimilation vs absorptive capacities
- A walk in the dark: innovation activities in poor countries
  - What if we have no clue?
  - Sectors, themes and units of analysis
- The way ahead

# STI indicators and theory in advanced economies

- The linear model is dead.
  - Long live the linear model (Godin 2006)
  - R&D targets will change the course of history.
  - UNESCO: R&D single most important metric in Africa. ☺
- Innovation is driven by producers.
  - In-house process innovators (Statistics Canada 2007 survey)  
(Chesbrough)
  - Mountain bikers and other crazy people (von Hippel)
- Innovation happens in manufacturing.
  - What about services, creative industries, public sector, GINs?
  - OECD Innovation Strategy, [www.innovationindex.org.uk](http://www.innovationindex.org.uk)

# STI indicators and theory in developing countries

- “North innovates, South copies and diffuses.”
  - Capital goods imports, IDI, disembodied technology transfer
- “Southern firms select and assimilate technologies from global pool.”
  - No absorption without prior accumulation of capabilities.
  - Innovation and diffusion belong together.
  - Upgrading is about managing technical change.
  - Organisational change is also important.
- Bogota Manual 2001
- Oslo Manual 3<sup>rd</sup> edition, appendix on developing countries
- Innovation is process of change, not just an outcome.



# Who else is interested in innovation in LICs, and in what exactly?

## Literature search on ISI, 1997- 2008

- “LICs and innovation”
- 1,400 papers
- 150 with product, process or organisational innovation
- Nigeria, Tanzania, Kenya, Pakistan
- Agriculture (37%)
- Health (26%)
- Manufacturing (14%)

## Issues and themes

- Innovation researchers are only interested in manufacturing (relevance?).
- Only in mfg are firms principal unit of analysis (concepts and methodology?) (conventional metrics OK).
- Most important actors in agriculture and health are individuals, households, communities. Networks are social.
- Health researchers believe in linear model.

## What does this mean?

- No consolidated body of knowledge about the determinants of broad-based innovation in the two areas that matter most to poor livelihoods: agriculture and health.
- Conventional metrics are insufficient or irrelevant.
- For the first time in decades, the number makers are (sort of) on their own.
- Explore feasibility of experimental surveys:
  - Social networks in rural subsistence communities: agricultural inputs
  - Health service provision in preventable diseases
  - Capabilities in township-based craft production
- Involve Nepad.